

*International Society for*  
**Environmental Ethics** *Volume 1, No. 2, Summer 1990*  
*Newsletter*

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## **General Announcements**

Two sessions are being planned for the American Philosophical Association Eastern Division meeting in Boston December 27-30. The first is a two hour panel, "Environmental Ethics: Current Trends, Future Prospects," moderated by Andrew Brennan, University of Stirling, Scotland. Panelists include Bryan Norton, Georgia Institute of Technology; Sara Ebenreck, Editor, EARTH ETHICS; Mark Sagoff, University of Maryland and Director of the Center for Philosophy and Public Policy; and Holmes Rolston, Colorado State University.

The second APA session will be of submitted papers, titles and presenters to be announced. Eric Katz, Vice-President and Program Chair is in charge. Professor Eric Katz, Department of Humanities, New Jersey Institute of Technology, Newark, NJ 07102. Phone 201/596-3266 or 516/666-1815.

Laura Westra, secretary of ISEE and previously at Auburn University, Alabama, has accepted a position in the Department of Philosophy at the University of Windsor. Her new address is Department of Philosophy, University of Windsor, Windsor, Ontario N9B 3P4, Canada.

ISEE has hosted its first program, May 26th in Victoria, BC, cosponsored with the Canadian Society for Practical Ethics. The theme was ENVIRONMENTAL STRATEGIES AND VISIONS. The program included Peter Miller giving an overview of the new "World Conservation Strategy for the 1990's" (now in draft), Laura Westra on contrasting Canadian and American visions for the environment, and Karen Warren on a feminist vision for the environment.

Professor Andrew Brennan is the contact person in the United Kingdom. Department of Philosophy, University of Stirling, Stirling FK9 4LA, Scotland. Telephone (0786) 73171. Dues can be sent to Brennan, with checks made to the Society in amount 6.50 pounds sterling.

Robert Elliot is the contact person for Australia and New Zealand. Send membership forms and dues in amount \$ 15.00 Australian (\$ 7.50 for students) to him. Address: Department of Philosophy, University of New England, Armidale, N.S. W. 2351, Australia. Telephone (087) 7333. Fax (067) 73 3122.

ISEE now has over 170 members, since its launching in January 1990. There are members in 20 different nations, including the Soviet Union. A constitution and by-laws has been drafted and will be formalized at the December 1990 APA meeting.

Members and others are encouraged to submit appropriate items for the newsletter to Holmes Rolston, Department of Philosophy, Colorado State University, Fort Collins, CO 80523, who is editing the newsletter. Phone 303/491-5328 (office) or 491-6315 (philosophy office) or 484-5883 (home). Fax 303-491-0528. Items may also be submitted to other members of the Governing Board. International items are especially welcomed.

Internationals are also encouraged to submit papers and paper proposals for the sessions proposed within the United States, especially if they are travelling within the United States on other business at the appropriate time.

Bryan Norton is organizing a day-long ISEE session for the American Association for the Advancement of Science annual meeting, February 14-19, 1991, in Washington, DC. The theme will be "Defining Environmental Health: Science, Economics, or Ethics," divided into morning and afternoon presentations, with papers by philosophers, economists, and environmental scientists. Speakers will be announced in the next ISEE Newsletter or contact Professor Bryan G. Norton, Social Sciences Division, Georgia Institute of Technology, Atlanta, GA 30332, Phones 404/894-3195, division office; 404/894-8752, his office.

Laura Westra is organizing an ISEE session for the Central Division, APA, next April 27-30, in Chicago. Send proposals to her by September 15, address above..

Ernest Partridge is organizing an ISEE session at the Pacific Division of the APA, meeting March 28-30, 1991 in the San Francisco Bay area. Send papers and proposals to him by October 1. Partridge will be returning from a trip to the Soviet Union in the fall, including a conference on Lake Baikal, and will make a report on Soviet environmentalism, where there are some interesting current developments philosophically as well as politically. Professor Ernest Partridge, Department of Philosophy, California State University, Fullerton, CA 92634-4080. Phones 714/441-2353 (home) and 714/773-3611 (main philosophy office).

Andrew Brennan is organizing a session at the Joint Session, July 13-16, University of Essex, and expects to discuss further ISEE UK/European plans there.

Andrew Brennan and Hans Peter Durr of the Max Planck Institute for Physics, Munich, will conduct a symposium on environmental ethics at the British Society for the Philosophy of Science annual conference September 21-23 at Wolfson College, Cambridge. Professor Durr is a member of the board of Greenpeace, Germany, and is well known for his work on conflict resolution and his attacks on the Reagan SDI program. Also at this conference there is a symposium on Science and Religion between John Polkinghorne, Cambridge, and A. O'Hoar, Bradford. Further details of the conference from Professor Michael Redhead, Department of History and Philosophy of Science, Free School Lane, Cambridge, UK.

Among the new memberships for ISEE is the Biopolitics International Organization, an Athens-based group now several years old. The president is Agni Vlavianos-Arvanitis. The fourth international conference will be held October 5-7 in Athens, with the theme of environmental education and the establishment of an International University for the Bio-Environment. further

information from Dr. Arvanitis, 10 Tim. Vassou St., GR 115 21, Athens, Greece.

Another member group is the Groupe de Recherche en Ethique Environnementale, an interdisciplinary group formed in September 1989 of sociologists, theologians, philosophers, and faculty in religious studies. Address: Professor Jose A. Prades, Departement de sciences religieuses, Universite du Quebec a Montreal, c.p. 8888 suc. "A". Montreal, Quebec H3C 3P8, Canada. Phone 514/987- 4427.

ISEE has been invited by the Federation International Des Societes de Philosophie (FISP) to participate in their forthcoming World Conference of Philosophy. The principal theme of the entire conference is "Philosophy, Man and the Environment." The conference will be held July 21-25, 1991 in Nairobi, Kenya. Laura Westra is organizing one or two sessions. If interested, contact her. The president of the International Federation of Philosophical Societies and head of the steering committee for the conference is Professor Evandro Agazzi, Fribourg University, Switzerland. Another conference on the horizon is in Moscow in 1993.

Members are invited and encouraged, in consultation with the officers and governing board, to arrange programs and presentations at appropriate learned societies and other suitable forums.

Charles Birch, an Australian ecologist and ecophilosopher, has won the Templeton Prize for his work combining biology and theology to develop an ethics of creation and conservation. Paul Ehrlich of Stanford calls Birch, "one of the two or three most distinguished ecologists in the world." He is best known for his *THE DISTRIBUTION AND ABUNDANCE OF ANIMALS* (with H. G. Andrewartha). Birch combined with John Cobb, Jr., to interpret life from a process perspective in *THE CELEBRATION OF LIFE: FROM THE CELL TO THE COMMUNITY*. He is professor of biology at the University of Sydney, recently retired. The Templeton Prize is often called the Nobel Prize in religion. Birch will donate much of his half of the \$ 535,000 prize to the Claremont School of Theology in California to further process thought, and to support a newly formed Geneva-based group working on Christian social and environmental ethics in Eastern Europe. See story in *CHRISTIAN SCIENCE MONITOR*, March 23, 1990.

Edward O. Wilson, Harvard University, and Paul Ehrlich, Stanford University, have jointly been awarded the Crafoord Prize from the Royal Swedish Academy of Sciences, a \$ 243,000 prize, for their research dealing with naturally fragmented populations that yield insights vital to stopping the degradation of biotic diversity. Edward O. Wilson and Peter Raven, director of the Missouri Botanical Garden, shared a French prize of the Institute de la Vie, an affiliate of the French Academy of Science, \$ 50,000, again for work in biological conservation. Wilson plans to use the prize money to build a research fund in the field of biodiversity.

Marine environmental ethics? For a regular updating on marine conservation issues, ask for the quarterly newsletter of the Center for Marine Conservation, 1725 DeSales St., N. W., Washington, DC 20036. Phone 202/429-5609. The Center has over 110,000 members nationwide. In the offshore United States, there are now eight National Marine Sanctuaries set aside to protect sensitive and unique marine habitats.

Environmental Ethics at the University of Kansas. J. Dennis Lowden is interested in receiving

outlines, syllabi, etc., prospective to a class in environmental ethics there beginning spring semester 1991, as part of an Environmental Studies curriculum. The class will be upper division, undergraduate level. Contact J. Dennis Lowden, Department of Philosophy, 3052 Wescoe, University of Kansas, Lawrence, KS 66045.

The Forest History Society is seeking a full time Director of Research and Publications. Applicants should have a Ph.D. in history or related social science with interests in forest history, land use, forest products and industries, recreation, conservation policies and politics, landscape perception and representation. The Forest History Society has 2,200 members and has a staff of seven persons. For a detailed job description, write to the Forest History Society, Inc., 701 Vickers Avenue, Durham, NC 27701. Phone: 919/682-9319.

The Cable Natural History Museum, Cable, Wisconsin, has received a Wisconsin Humanities Committee and National Endowment for the Humanities grant to present a series of programs, purchase books, and write an informational brochure on environmental ethics, during the fall and winter of 1990-91. Contact: Allison D. Slavick, Director, Cable Natural History Museum, P. O. Box 416, Cable, WI 54821-0416. Phone 715/798-3890. Other societies as well as individuals may join ISEE. A recent society to join is the Societa' Italiana di Bioetica (Italian Bioethics Association) headed by Professor Brunetto Chiarelli, Via del Proconsolo 12, Firenze, Italy 50123.

The Culture and Animals Foundation is a nonprofit, cultural organization committed to fostering the growth of intellectual and artistic endeavors united by a positive concern for animals. It was founded in 1985 by Tom Regan, who is its president. The foundation supports programs in research, in artistic creativity, and in performance. It offers various videotapes and films, books, and other materials for sale. John Bowker, Dean of Trinity College, University of Cambridge, is the vice president. Contact Professor Tom Regan, Department of Philosophy and Religion, North Carolina State University, or the Culture and Animals Foundation, 3509 Eden Croft Drive, Raleigh, NC 27612. Phone 919/782-3939.

Professor John E. Carroll, Environmental Conservation, Department of Forest Resources, University of New Hampshire, Durham, NH 03824, is interested in the topic, "Employing the Humanities in Post-Graduate and Professional Education in Agricultural Science, Natural Resource Management, and Environmental Studies," and especially wishes to hear from persons with experience at land grant universities in this regard.

A Harvard Environmental Network has been established by students, faculty, and others there. Contact Ellen Jennings at Harvard Divinity School, 45 Francis Avenue, Cambridge, MA 02138. Recent classes at Harvard Divinity School have included Richard Niebuhr, "Theology and Nature," Theodore Hiebert, "Hebrew Bible and Nature," and Masatoshi Nagatomi, "Buddhism and Nature." This fall Sally McFague, visiting professor from Vanderbilt University, will teach "Ecological Theology."

The Graduate School of the University of Colorado is offering a new Certificate Program in Environmental Policy. It is open to graduate students in a number of disciplines, including philosophy. Contact J. Samuel Fitch, Director, Campus Box 330 or contact the Center for Values

and Social Policy, Dale Jamieson, Director, University of Colorado at Boulder, Boulder, CO 80309- 0232.

Environmental news by computer? Two networks are available if you have a modem.

EnviroNet is operated by Greenpeace. There is no charge, although you must make a call to a California number. Phone 415/861-6503, connect at 2400 baud, N-8-1 (others may be possible), and follow instructions. Enter your name and select your own password, then at the main menu read the new user information and fill out the brief questionnaire. The system is available 24 hours a day. It features ecological and peace issues, supports conferences (bulletin boards) and mail.

Econet is a much more comprehensive system, for which there is an initial charge of \$15 and a monthly charge of \$10. Included in the monthly charge is one free hour of off-peak time. Additional hours of off-peak time are \$ 5. Peak time is \$ 10 per hour. There are nearly 200 "conferences" (bulletin boards) with different kinds of environmental information, and subscribers can tailor a list to their interests, and download the new items with a minimum of online time. Phone 415/923-0900 for voice information. Bill Leland is the Econet director. There are local gateway numbers at over 800 cities and towns across the U.S, at both 1200 and 2400 baud rate. This access is through Telenet, a Sprint system (not to be confused with Telnet, used by many universities), and there is no further charge. There is also access from related networks in the United Kingdom, Australia, Canada, and Sweden. The network features news, information, interest groups, mail, bulletin boards, environmental education items, and exchanges between over 1,400 users. Econet is one of the services of the Institute for Global Communications, a nonprofit, charitable institute based in San Francisco.

THE ENVIRONMENTAL AND ARCHITECTURAL PHENOMENOLOGY NEWSLETTER has recently been launched as a forum and clearing house for research and design that incorporates a qualitative approach to environmental and architectural experience. A key concern is design, education, and policy supporting and enhancing natural and built environments that are beautiful, alive, and humane. The newsletter is interested in the sense of place, of home, of environmental encounter and its relation to environmental ethics, responsibility, and action. There will be three issues each year. Contact David Seamon, Department of Architecture, College of Architecture and Design, Kansas State University, Manhattan, KS 66506.

## **Jobs in Environmental Conservation**

Three good sources for finding jobs in environmental conservation are:

ENVIRONMENTAL OPPORTUNITIES, a 10-12 page monthly listing of jobs, seasonal work, internships, and other opportunities. Published in Association with the Environmental Studies Department, Antioch/New England Graduate School, Keene, New Hampshire. Subscriptions are \$ 44 per year. This publication should be in every college and university placement office/career guidance office. Write for a sample copy to alert students to it. Address: P. O. Box 788, Walpole, NH 03608. Phone 603/756-9744.

ENVIRONMENTAL JOB OPPORTUNITIES, 7-8 pages, 10 issues per year. Published by Institute for Environmental Studies, University of Wisconsin, Madison. Address: 550 N. Park St., 15 Science Hall, Madison, WI 53706. Subscriptions \$ 10 per year. Worthwhile, but ENVIRONMENTAL OPPORTUNITIES is much more thorough.

The National Association of Interpreters, P. O. Box 1892, Ft. Collins, CO 80522, offers a dial/tape listing service. Phone 301/491-7410 any time for listings of full-time, seasonal, temporary jobs. Phone 303/491-6434 after office hours or all day Friday, Saturday, and Sunday for listings of internships. Photocopies of listings available for \$ 3.00.

WOMEN IN NATURAL RESOURCES is a two page newsletter-flyer published quarterly and available from Women in Natural Resources, Bowers Laboratory, University of Idaho, Moscow, Idaho 83843. Phone 208/885-6754. The newsletter features job announcements.

See also COMPLETE GUIDE TO ENVIRONMENTAL CAREERS, Island Press, Washington, D. C. and Covelo, CA, 1989, described in ISEE Newsletter, Spring 1990.

The New Jersey School of Conservation, of Montclair State College, has several teaching internships and graduate fellowships in environmental studies. Contact Dr. John J. Kirk, Director and Professor of Environmental Studies, New Jersey School of Conservation, Montclair State College, R. D. #2, Box 272, Branchville, NJ 07826.

## **Recent Books, Articles, and Other Materials**

Articles in ENVIRONMENTAL ETHICS will not ordinarily be listed in this Newsletter, under the assumption that members will be familiar with this journal.

--The Ohio Humanities Council has published, "Environmental Crisis and Morality," a reading program written by Norman S. Care, professor of philosophy at Oberlin College. The pamphlet is addressed to literate nonphilosophical persons and is especially good for making the crossover from popular concern for nature and environmental issues into a more philosophical approach to environmental ethics. Care introduces five books: Thoreau's WALDEN, Leopold's SAND COUNTY ALMANAC, Partridge's RESPONSIBILITIES TO FUTURE GENERATIONS, Rolston's PHILOSOPHY GONE WILD, and Regan's EARTHBOUND. Designed for a discussion evening and useful as a take-home handout to get persons started in environmental ethics. The Council has also produced two other pamphlets: "American Environmental History" by Clayton Koppes and "Readings in Environmental Literature" by Lawrence Buell. For single copies, contact the Ohio Humanities Council, P. O. Box 06354, Columbus, OH 43206-0354. Phone 614/461-7802. For multiple copies, ask for Oliver Jones.

The Ohio Humanities Council has also produced a series of twelve posters under the general title UPSTREAM/DOWNSTREAM IN OHIO. Each poster focuses the viewer's attention on key environmental issues and questions.

1. Upstream/Downstream in Ohio. The river major rivers in Ohio, and the name Ohio derived from a native American term for "beautiful river."
2. The Changing Face of Ohio. Natural history reshaped by agriculture and industry.
3. Earthly Visions. Anticipations of the early settlers.
4. The Cost of Coal. Degradation of land and air from mining.
5. A Sense of Nature's Limits. Floods and waste in the waters.
6. Individual Choices on Common Ground. The exercise of individual freedom and environmental responsibility.
7. After the Harvest. Wetlands and water pollution from agriculture.
8. Shared Resources, Common Concerns. Lake Erie and the Great Lakes.
9. Prospects for Renewal. Restoring the Cuyahoga River.
10. The Stress of Growth. The quality of life in cities depends on intelligent use of land, water, air.
11. The Toll of Transportation. The benefits and costs of car and rail.
12. A Time for Choices. Past decisions have reshaped the landscape. What of the future? In a sense we all live both upstream and downstream from other generations that pass before and after us on the river of time.

The poster series is quite well done and serves to stimulate thought, either by individual viewers or in discussion groups. There is a discussion guide. An excellent example of imaginative use of posters for environmental education, which might well be imitated in other regions, especially in more developed areas. Contact Oliver Jones, address above.

--Daniel H. Kealey, REVISIONING ENVIRONMENTAL ETHICS. Chapter titles: Environmental Ethics and Psychohistory; Mental and Magical Environmental Ethics; Mythic and Integral Environmental Ethics, Plotinus on Nature and Contemplation and the One; All Life is Yoga; Towards an Integral Ecological Ethic. Drawing on Plotinus, Aurobindo, and Max Scheler, Kealey outlines an adequate ecological ethic. Kealey is assistant professor in the department of philosophy and religion at Towson State University. 131 pages. State University of New York Press, 1990. \$ 44.50 hardback, \$ 14.95 paper.

--David G. Hallman, CARING FOR CREATION. Wood Lake Books, Box 700, Winfield, B.C. VOH 2CO, Canada. A primer on environmental problems for general reading and group study, showing ways in which theology has contributed to abuse of the Earth, and proposing changes in theology, lifestyle, and economics.

--THE ECOLOGIST has a special issue on deep ecology, vol. 18, nos. 4/5, 1988. Articles: Grover Foley, "Deep Ecology and Subjectivity"; Henryk Skolimowski, "Eco-philosophy and Deep Ecology"; Arne Naess, "Deep Ecology and Ultimate Premises"; Brian Tokar, "Social

Ecology, Deep Ecology and the Future of Green Political Thought"; Robyn Eckersley, "The Road to Ecotopia? Socialism vs. Environmentalism"; Richard Sylvan and David Bennett, "Taoism and Deep Ecology"; and Edward Goldsmith, "The Way: An Ecological Worldview."

--Hiromasa Mase, Keio University, Japan, "Nature and Ethics: Whiteheadian Approach," ANNALS OF THE JAPAN ASSOCIATION FOR PHILOSOPHY OF SCIENCE (Tokoyo) 7(March, 1988):155-161. Argues for an environmental ethics based on intrinsic value in nature, using a Whiteheadian philosophy, with some attention to Aldo Leopold. A key category is "experience" in the Whiteheadian sense.

--Charles B. Stone and Danielle B. Stone, eds. CONSERVATION BIOLOGY IN HAWAII. Honolulu: University of Hawaii Cooperative National Park Resources Studies Unit, 1989. Distributed by University of Hawaii Press, Honolulu. Today's Hawaiian biota is the most unique assemblage anywhere and the most endangered in the United States and one of the most endangered in the world. Biological and sociological analyses. The closing section is on values and ethics, with essays on native Hawaiian conservation values, outdoor ethics, humanity's responsibility for future life, and priorities in paradise, conservation education in Hawaii.

--J. Ronald Engel and Joan Gibb Engel, eds., ETHICS OF ENVIRONMENT AND DEVELOPMENT: GLOBAL CHALLENGE, INTERNATIONAL RESPONSE is now available from the University of Arizona Press, 1230 N. Park Ave., Tucson, AZ 85719. Twenty three ethicists from fifteen nations. \$ 29.95 plus \$1.25 postage. Phone 800/426-3797. The British publisher is Belhaven Press, 25 Floral Street, London, WC2E 9DS.

There are a number of books sharing an emerging realization that the Earth's natural environment and even the planet itself are not so stable and unchanging as we have traditionally thought. Humans have been responsible for many of the changes now being deplored and it may still be possible to take restorative steps.

Daniel B. Botkin, Margriet F. Caswell, John E. Estes, and Angelo A. Orio, CHANGING THE GLOBAL ENVIRONMENT: PERSPECTIVES ON HUMAN INVOLVEMENT. Boston: Academic Press, 1989. Twenty seven articles by diverse authors, largely environmental and applied scientists. This anthology is envisioned as an updating of W. L. Thomas, Jr., ed., MAN'S ROLE IN CHANGING THE FACE OF THE EARTH, a landmark publication in 1955. More on this in ISEE Newsletter, Spring 1990.

--Thorkil Kristensen and Johan Peter Paludan, eds., THE EARTH'S FRAGILE ECOSYSTEMS: PERSPECTIVES ON GLOBAL CHANGE. IFIAS Research Series, Vol. 4. Boulder, CO: Westview Press, 1988. \$ 30. --S. Fred Singer, ed., GLOBAL CLIMATE CHANGE: HUMAN AND NATURAL INFLUENCES. Paragon House/An ICUS Book, 1989. \$ 34.95.

--Constance Mungall and Digby J. McLaren, eds., PLANET UNDER STRESS: THE CHALLENGE OF GLOBAL CHANGE. Toronto: Oxford University Press, 1990. Sponsored by the Royal Society of Canada.

--Ruth S. DeFries and Thomas F. Malone, eds., GLOBAL CHANGE AND OUR COMMON

FUTURE. Washington, D.C.: National Academy Press, 1989. Twenty-two articles by a variety of scholars and policy makers. Papers from a forum sponsored by the National Academy of Sciences.

--James Lovelock, *THE AGES OF GAIA: A BIOGRAPHY OF OUR LIVING EARTH*. New York: W.W. Norton, 1988. \$ 16.95.

--Daniel B. Botkin, *DISCORDANT HARMONIES: A NEW ECOLOGY FOR THE TWENTY-FIRST CENTURY*, Oxford University Press, 1990.

--*HARPER'S MAGAZINE*, April 1990, contains a forum, "Only Man's Presence Can Save Nature," moderated by Michael Pollan, executive editor of *HARPER'S*, with participants Daniel B. Botkin, professor of biology and environmental studies, University of California, Santa Barbara; Dave Foreman of Earth First!; James Lovelock, who developed the Gaia theory; Frederick Turner, professor of arts and humanities, University of Texas at Dallas; and Robert D. Yaro, regional planner in the New York metropolitan region.

--John Allen, ed., *ENVIRONMENT 90/91*. Guilford, CT: Dushkin Publishing Group, 1990. In the annual editions series. Thirty- one reprints of recent magazine feature articles on the environment, for example *TIME'S* "What on Earth Are We Doing?" (cover story of their "Planet of the Year" issue), *ENVIRONMENT'S* "The Intertwining of Environmental Problems and Poverty," *NATIONAL WILDLIFE'S* "21st Environmental Quality Index: The Planet Strikes Back," *SCIENCE NEWS'*, "Where Acids Reign," and "Lessons from the Flames" (Yellowstone fires). Sections on people and hunger; energy; pollution; land, water, and air; and endangered species. Journal articles make easier reading for lower level students in environmental ethics, and they give upper level students opportunity to analyze media coverage of issues. Articles are chosen to be timely, relevant, and provocative.

--Walter V. Reid and Kenton R. Miller, *KEEPING OPTIONS ALIVE: THE SCIENTIFIC BASIS FOR CONSERVING BIODIVERSITY*. Washington, DC: World Resources Institute, October 1989. 1709 New York Avenue, N. W. Washington, DC 20006. \$ 10.00.

--David W. Lime, ed., *MANAGING AMERICA'S ENDURING WILDERNESS RESOURCE*. Proceedings from the September 1989 conference in Minneapolis and northern Minnesota. 118 papers, 700 pages, \$ 32.50. Order from University of Minnesota, Distribution Center, Coffrey Hall, 1420 Eckles Avenue, St. Paul, MN 55108.

--*CHURCH AND SOCIETY*, vol. 80, no. 4, March/April 1990 is a special issue, "While the Earth Remains...." devoted to ecojustice, with papers on theology and environmental ethics, waste disposal, sustainable agriculture, water quality, climate change. Holmes Rolston contributes a paper, "Wildlife and Wildlands: A Christian Perspective."

--Laura Westra, "'Respect,' 'Dignity,' and 'Integrity,': An Environmental Proposal for Ethics," *EPISTEMOLOGIA* 12(1989):91-124.

Westra proposes an account that has a wider reach than either Albert Schweitzer's reverence for

life or Paul Taylor's respect for nature.

--Richard Sylvan, "Gaeon Greenhouse, Nuclear Winter, and Anthropic Doomsday," Research Series in Unfashionable Philosophy, No. 4, 1990, Division of Philosophy and Law, Research School of Social Sciences, Australian National University, Canberra. Some provocative reflections, especially on the greenhouse effect. Possible responses rationally assessed, pessimism, skepticism, but Sylvan concludes: "From the angle of radical change, then, the impact of the Greenhouse problematique is far from entirely negative. For it may encourage or even force many more of us into thinking about and doing what should be done from a deep perspective anyway, such as rectifying recent heavy human impact upon environments, and beginning at once to put in place more environment-friendly arrangements and structures." No. 4 in this series includes two other papers by Sylvan, "As to the Purpose of the Universe," and "Illogic and Illusion in Biologic Evolution."

Contact Richard Sylvan, Department of Philosophy, Research School of Social Sciences, Australian National University, P. O. Box 4, Canberra, ACT 2600. Phone 062-49 5111.

--Richard Sylvan, "A Critique of (Wild) Western Deep Ecology: A Response to Warwick Fox's Response to an Earlier Critique," manuscript paper. "Western deep ecology differs in important respects from the deep ecology originated and pursued by Naess, ... AUTHENTIC deep ecology. ... Western deep ecology ... is very roughly a doctrine of the west of those new world continents where environmental philosophy functions; it has been advanced primarily by West Coast Americans (Devall, Drengson, Sessions and others) and associated West Australians (Fox, now of Tasmania, also Hallem and others). Unlike authentic deep ecology, Western deep ecology is hostile to environmental ethics, which it tends to dismiss as mere axiology; and it is excessively enthusiastic about transpersonal experience, spiritual 'paths' and 'ways', and unitarian metaphysics. ... On a personal level, I am quite attracted by authentic deep ecology; but I am substantially repelled by Western deep ecology." Contact Richard Sylvan, address above.

--Joseph Wayne Smith, THE AUSTRALIA THAT CAN SAY "NO!". The Multifunction Polis Project, Asia-Pacific Millenarianism and the Tyranny of Technology. 1990. A criticism of the idea of constructing in Australia a joint Japanese-Australian high technology city, which will be a prototype of 21st century cities. Analysis of the concepts of society and nature that inspire the project. Analysis of environmental impact of such a city. Joseph Wayne Smith is Research Fellow, School of Humanities, The Flinders University of South Australia, Bedford Park, 5042, Australia.

--R. Edward Grumbine, "Viable Populations, Reserve Size, and Federal Lands Management: A Critique," CONSERVATION BIOLOGY, vol. 4, no. 2, June 1990. Current viable population theory and reserve size studies suggest that biological diversity for North American national parks and forests is inadequately protected, a problem compounded by lack of landscape-level management, competition between federal land management agencies, and bureaucratic inertia. An ecosystem management model for reform is outlined.

--Richard Cartwright Austin, RECLAIMING AMERICA: RESTORING NATURE TO CULTURE. Creekside Press, P. O. Box 331, Abingdon, VA 24210. Phone 703/628-6416. This is

the fourth in a series on environmental theology, all by Austin, who is a Presbyterian minister active in environmental conservation in the Appalachian area. Previous titles, BEAUTY OF THE LORD: AWAKENING THE SENSES; HOPE FOR THE LAND: NATURE IN THE BIBLE, and BAPTIZED INTO WILDERNESS: A CHRISTIAN PERSPECTIVE ON JOHN MUIR, were published by John Knox Press, now Westminster/John Knox, though all may now be ordered from Creekside Press.

--THE NEW ROAD is the bulletin of the World Wildlife Fund's Network on Conservation and Religion. Six issues each year. Internationally oriented. Short articles and news, names of contact persons, in attractive newspaper format. Contact: The New Road, 10 rue des Fosses, CH-110 Morges, Switzerland.

--"Humanity Must Protect Nature," booklet on what Islam, Taoism, Hinduism, and Christianity have to say about environmental protection. Third World Science Movement, Consumers Association of Penang, 87 Cantonment Road, 10250 Penang, Malaysia.

--WORLD ENVIRONMENTAL DIRECTORY, 5th edition, North America. More than 1,000 looseleaf pages, 12,000 listings, 24,000 contact names. \$ 131.50 postpaid. Available from Business Publishers, Inc., 951 Pershing Drive, Silver Spring, MD 20910-4464. Phone 301/587-6300.

Publishers have been surprised at the popular sales of a number of how-to-do-it books, sometimes issued in anticipation of Earthday 1990. Among them are the following:

--50 SIMPLE THINGS YOU CAN DO TO SAVE THE EARTH, by the EarthWorks Group. Earthworks Press, 1400 Shattuck Avenue, Berkeley, CA 94709, 1989. \$ 4.95. Printed on recycled paper, this book topped the sales of all other paperback nonfiction titles in the week of February 25th to March 24th.

--SAVE OUR PLANET: 750 EVERYDAY WAYS YOU CAN HELP CLEAN UP THE EARTH, by Dianne MacEachern. Dell, New York, 1990. \$ 9.95.

--THE GREEN CONSUMER, by John Elkington, Julia Hailes and Joel Makower. Penguin Books, New York, 1990. \$ 8.95. American version of a British best-seller. Also a Canadian version, and there is a like-minded Australian one.

--OUR EARTH, OURSELVES, by Ruth Caplan and the staff of Environmental Action. Bantam Books, New York, 1990. \$ 9.95.

--CITIZEN'S GUIDE TO SUSTAINABLE DEVELOPMENT, edited by Walter H. Corson. Global Tomorrow Coalition, 1325 G. Street, N. W., Suite 915, Washington, DC 20005-3104, 1989. \$ 5.00.

--THE GLOBAL ECOLOGY HANDBOOK: WHAT YOU CAN DO ABOUT THE ENVIRONMENTAL CRISIS, by the Global Tomorrow Coalition. Boston: Beacon Press, 1990. \$ 16.95.

--HINTS FOR A HEALTHY PLANET, by Heloise. New York: Perigree Books, 1990. \$ 7.95.

--DESIGN FOR A LIVABLE PLANET: HOW YOU CAN HELP CLEAN UP THE ENVIRONMENT, by Jon Naar. New York: Harper and Row, 1990. \$ 12.95.

--THE SOLUTION TO POLLUTION: 101 THINGS YOU CAN DO TO CLEAN UP THE ENVIRONMENT, by Laurence R. Sombke. New York: Master Media Limited, 1990. \$ 7.95.

--SAVING THE EARTH: A CITIZEN'S GUIDE TO ENVIRONMENTAL ACTION, by Will Steeger and Jon Bowermaster. New York: Alfred A. Knopf, 1990. \$ 10.95.

--Henry A. Pearson, Susanna B. Hecht, and Theodore E. Downing, eds., DEVELOPMENT OR DESTRUCTION: THE CONVERSION OF FOREST TO PASTURE IN LATIN AMERICA. An interdisciplinary Man and the Biosphere study. 416 pages, \$ 25.00. Boulder, CO: Westview Press, 1990.

--Nordal Akerman, ed., MAINTAINING A SATISFACTORY ENVIRONMENT: AT WHAT PRICE? Six European specialists discuss an agenda for international environmental policy. Published in cooperation with the Swedish Institute for International Affairs. 100 pages, \$ 16.50. Boulder, CO: Westview Press, 1990.

--Margery L. Oldfield and Janis B. Alcorn, eds., BIODIVERSITY: TRADITIONAL MANAGEMENT AND DIVERSITY OF BIOLOGICAL RESOURCES. Dual themes of conservation of biological resources and rural development. 320 pages, \$ 30.95. Boulder, CO: Westview Press, 1990.

--Joanne Vining, ed., SOCIAL SCIENCE AND NATURAL RESOURCE RECREATION MANAGEMENT. The mixture of natural science and social science, managing nature and managing people, the conceptual foundations of natural recreation resource management. 330 pages, \$ 29.50. Boulder, CO: Westview Press, 1990.

--Tom Regan, THE THREE GENERATION: REFLECTIONS ON THE COMING REVOLUTION. Temple University Press, forthcoming January 1991. \$ 24.95. Essays with the central philosophical theme that an anthropocentric ethics cannot be rationally defended and that moral consideration extends further than humans to include animals and a responsibility to protect the larger community of life. "The human life is but one life form among many, and what distinguishes us from the larger community of life is not our power to subdue but our responsibility to protect." Includes essays in biomedical research, feminism and vivisection, child pornography (paradigmatically wrong by a logic from which it also follows that vivisection is wrong), abolishing animal agriculture, on Christians and what they eat, on the harmony and also irreconcilable differences between ecofeminists and deep ecologists, especially Carolyn Merchant, Marti Kheel, George Sessions and Bill Devall. Those interested in environmental ethics will be especially interested in Regan's analysis of environmental holism (Leopold's land ethic) in the essay on animal agriculture. Christians will be interested in Regan's analysis of whether Christians ought to eat meat.

--Jay McDaniel, ed., *LIBERATING LIFE: CONTEMPORARY APPROACHES TO ECOLOGICAL THEOLOGY*. Maryknoll, NY: Orbis Press, 1990.

--*HUMAN DIMENSIONS IN WILDLIFE NEWSLETTER*. The quarterly publication of the Human Dimensions in Wildlife Study Group. Short articles, news, notes, events, issues, positions available in the humanistic dimensions of encountering, appreciating, managing wildlife. Contact Dr. Ted Cable, editor, Department of Forestry, Kansas State University, Manhattan, KS 66506. Membership is \$ 10 per year, \$ 5 for students; membership dues to Dr. Perry Brown, College of Forestry, Oregon State University, Corvallis, Oregon 97331-5703.

--Stephen R. Kellert, "The Animal Rights Movement: A Challenge or Conspiratorial Threat to the Wildlife Management Field." In a short article, Kellert, professor at the Yale School of Forestry and Environmental Studies, argues that the animal rights movement is more challenge and opportunity than conspiratorial threat to the wildlife management profession. In *HUMAN DIMENSIONS IN WILDLIFE NEWSLETTER*, vol. 8, no. 4, Fall 1989.

--Charles F. Wilkinson, *THE AMERICAN WEST: A NARRATIVE BIBLIOGRAPHY AND A STUDY IN REGIONALISM*. Wilkinson is a lawyer and professor at the University of Colorado Law School, interested in incorporating an ethic of place and a sense of regional residence into natural resource law. Niwot, Colorado: University Press of Colorado, 1989.

--Charles F. Wilkinson, *THE EAGLE BIRD: SEARCHING FOR AN ETHIC OF PLACE*. Salt Lake City, Utah: Howe Brothers. Forthcoming summer 1990.

--Charles F. Wilkinson, "Aldo Leopold and Western Water Law: Thinking Perpendicular to the Prior Appropriation Doctrine," *LAND AND WATER REVIEW* (University of Wyoming, College of Law) 24(1989):1-38. The classic prior appropriation doctrine, "first in time, first in right," mainstay of water law in the West, is bad economics, does not respect the rights of other governments, ignores widely accepted policy objectives, such as maintenance of instream flows and long-term water planning. The classic doctrine is bad science. Leopold's land ethic, though not initially addressing water management policy, is a comprehensive ecological approach to natural resource management and land-use practices, and is directly applicable to water management reform. An ecosystem approach would result in comprehensive watershed resource planning, maximizing societal benefits derived from resource use on a sustainable basis, stability for private water rights, maintenance of water quality, prevention of soil loss, all based on preserving "the integrity, stability, and beauty" of the watershed community. Wilkinson illustrates his claim with efforts on several fronts to move in this direction.

--Robert Hedin and Gary Holthaus, *ALASKA: REFLECTIONS ON LAND AND SPIRIT*. Tucson: University of Arizona Press, 1989. 322 pp. \$ 24.95 hardcover. Twenty-two writers, past and present, reflect on the mysterious intimacy "that comes when the old psychic links between humanity and the natural world are reestablished."

--Agni Vlavianos-Arvanitis, ed., *BIOPOLITICS: THE BIO-ENVIRONMENT*. Vol. II: *BIOS IN THE NEXT MILLENNIUM*. Published by the Biopolitics International Organisation, 10, Tim

Vassou, 115 21 Athens, Greece. 1989. Phone 643-2419. With sections on theology, ethics, and philosophy, literature, youth, women, law, education, media, urban planning and architecture, international cooperation, and bio-diplomacy and culture. Dozens of articles. Andrew Brennan, Philosophy, University of Stirling, Scotland, contributes an article on ecological humanism.

--Peter Soderbaum, "Economics, Ethics, and Environmental Problems," JOURNAL OF INTERDISCIPLINARY ECONOMICS 1(1986):139-153 (Great Britain). Peter Soderbaum is at the Swedish University of Agricultural Sciences, Uppsala.

--EARTH ETHICS is a recently launched periodical in environmental ethics, published by the Public Resource Foundation, 1815 H Street, NW, Suite 600, Washington, DC 20006. There is no fixed subscription price; a contribution of \$ 10 or more is encouraged. The format is short articles and brief notes, around the theme of evolving values for an Earth community. Sara Ebenreck is editor, to whom editorial correspondence should be directed, 3451 Sixes Road, Prince Frederick, MD 20678.

--George Bush on Environmental Ethics. On June 8, 1989, President George Bush outlined five principles of his administration's environmental ethic in an address to the Sixth International Waterfowl Symposium in Washington, DC. Bush said, "It's time to renew the environmental ethic in America," and went on to claim that "the environment is a moral issue, ... it is imperative that we preserve the earth and all its blessings," citing Aldo Leopold and his land ethic. Bush emphasized his policy of "no net loss" of wetlands. See story in EARTH ETHICS, vol. 1, no. 2, p. 10.

--Robert Nozick on intrinsic value: "Something has intrinsic value, I suggest, to the degree that it is organically unified. Its organic unity is its value. ... The common structure of value across different areas, and the major dimension that underlies almost all value, is the degree of organic unity. Given this, we can understand why we hold other particular things to be valuable in themselves--for example, whole ecological systems with their complexly interrelated equilibria."  
-- Robert Nozick (Philosophy, Harvard University), THE EXAMINED LIFE (New York: Simon and Schuster, 1989), p. 164. Nozick also finds organic unity in works of art.

--William K. Reilly on intrinsic value. The U.S. Environmental Protection Agency chief in a speech prepared for a gathering of Catholic leaders in Washington, declared that "natural systems have an intrinsic value--a spiritual worth--that must be respected for its own sake." A new "spiritual vision" of conservation and "an ethic of environmental stewardship grounded in religious faith ... could be a powerful force." Quoted in the LOS ANGELES TIMES, April 19, 1990, p. A3.

--Holmes Rolston, III, "Biology and Philosophy in Yellowstone," BIOLOGY AND PHILOSOPHY 5 (no. 2, 1990):241-258. Philosophical issues in Yellowstone biology and policy, responding to the criticism of Alston Chase, PLAYING GOD IN YELLOWSTONE. Chase, formerly a professor of philosophy at Macalaster College, has been an acid critic of park policy and the naturalistic philosophy of "letting nature take its course" on which it is based. Chase favors a policy based on "sound, scientific management." A shortened version of Rolston's article will appear in HIGH COUNTRY NEWS.

--F. Herbert Bormann, and Stephen R. Kellert, eds, *ECONOMICS, ECOLOGY, ETHICS: THE BROKEN CIRCLE*. Yale University Press, forthcoming, fall 1990 or early 1991. A book resulting from a series of thirteen lectures at Yale University. Authors are: Edward O. Wilson, Harvard University; David Pimentel, Cornell University; Wes Jackson, The Land Institute; Thomas Eisner, Cornell University; David Ehrenfeld, Rutgers University; Gene E. Likens, Institute of Ecosystem Studies, New York Botanical Garden; William A. Butler, Dickstein, Shapiro & Morin, Washington, DC; Norman Myers, Consultant, Oxford, England; William Goldfarb, Rutgers University; Holmes Rolston, III, Colorado State University; Malcolm Gillis, Duke University; Paul Connett, St. Lawrence University; and Donella "Dana" Meadows, Dartmouth University.

--READERS DIGEST, June 1990, contains an article, "Animal Rights War on Medicine" by John G. Hubbell. The article claims that extremists are crippling vital medical research that promises to save millions of lives. One of the "extremists" cited is Tom Regan, for his endorsing of civil disobedience on behalf of animal rights. The same issue contains an article, "Simple Ways You Can Help Save the Earth," adapted from *50 SIMPLE THINGS YOU CAN DO TO SAVE THE EARTH*. *READER'S DIGEST* claims to be the world's most widely read magazine, selling 28 million copies in 15 languages monthly.

--A Japanese translation of Aldo Leopold's *SAND COUNTY ALMANAC* is in press. The translator is Keichi Furuya and the publisher is Poporo Publishing Co., Ltd, Attn: Nobuo Hiratsuka, 1-36-2 Honancho Suginamita, Tokoyo, Japan. Phone 03-324-0069.

--Thijs De La Court, *BEYOND BRUNTLAND: GREEN DEVELOPMENT IN THE 1990'S* (London and Atlantic Highlands, NJ: Zed Books, through Humanities Press in the U.S.), 1990. A highly critical and useful commentary on the Bruntland Report. 128 pages for the modest cost of \$ 39.95 in the U.S.!

--Robin Attfield, *THE ETHICS OF ENVIRONMENTAL CONCERN*, currently out of print, is to be republished in 1991 by the University of Georgia Press, with a revised introduction.

--Bernard E. Rollin, ed., *THE EXPERIMENTAL ANIMAL IN BIOMEDICAL RESEARCH, VOLUME I: A SURVEY OF SCIENTIFIC AND ETHICAL ISSUES FOR INVESTIGATORS*. 21 original articles covering such topics as the ethical issues associated with animal use, legal and regulatory matters, the issues of stress, pain, and suffering, anesthesia and analgesia, husbandry requirements and disease control. 464 pages. Inside the U.S., \$ 195, outside the U. S. \$ 230. Boca Raton, Florida: CRC Press. One needs to do well in biomedical research to be able to afford books like this.

--M. I. Budyko and Yu. A. Izrael, *ANTHROPOGENIC CLIMATIC CHANGE*. Tuscon: University of Arizona Press, 1990. A Soviet view.

--Andrew McLaughlin, "Ecology, Capitalism, and Socialism" *SOCIALISM AND DEMOCRACY* Spring/Summer 1990. There are theoretical and practical difficulties matching

capitalism with an ecologically sound human society or with adequate respect for nature. Socialism has more promise theoretically, but existing socialist societies are often no better in practice than capitalist ones. The centralized Soviet bureaucracy is a major problem. Bioregional (green) socialism could be an answer. Useful survey of the Soviet debate about nature preserves.

--Juliet Ucelli, "Drugs, Women's Work and Ecology: Three Burning Questions for our Movement," SOCIALISM AND DEMOCRACY Spring/Summer 1990.

--The Hastings Center has issued a special supplement to the HASTINGS CENTER REPORT, May/June 1990, entitled "Animals, Science, and Ethics," edited by Strachan Donnelley and Kathleen Nolan. The report is the outcome of two years of deliberation, a Hastings Center project, "The Ethics of Animal Experimentation and Research," of which Donnelley and Nolan were co-directors. The project involved nearly two dozen physicians, philosophers, veterinarians, lawyers, and scientists involved in animal research, representatives of whom have written sections of the report.

The Hastings report identifies itself as occupying the "troubled middle," seeking to avoid the extremes of animal rights and of anthropocentrism. Among other conclusions: "We now face issues that lie beyond the suffering of individual animals, and we must weight the benefits of gaining certain kinds of knowledge against the ENTIRE range of consequences of research efforts. Seemingly innocuous scientific procedures may have negative effects on the target species as well as the ecosystem. In short, field research forces us to face directly the fact that humans are but a part of a complex system that needs many flourishing organisms if any are to survive."

The Hastings Center is considering a further initiative, a three- year project, "Humans, Animals, and the Environment: Ethical Responsibilities and Decisionmaking." This project will investigate more intensively the destruction of ecosystems, atmospheric degradation, toxic wastes, wildlife and wildlife habitats, genetic diversity, species preservation, animal research in the wild, and the experimental use of endangered species. The Hastings Center, 255 Elm Road, Briarcliff Manor, NY 10510. Phone 914/762-8500.

--Allan Hunt Badiner, DHARMA GAIA: A HARVEST OF ESSAYS IN BUDDHISM AND ECOLOGY. Essays by over thirty Buddhist thinkers and ecologists. Parallax Press, P. O. Box 7355, Berkeley, CA 94707. 1990. \$ 15.00.

--Barry Commoner, MAKING PEACE WITH THE PLANET. New York: Pantheon Books, 1990. \$ 19.95.

--Richard H. Gaskins, ENVIRONMENTAL ACCIDENTS. Philadelphia: Temple University Press, 1989. \$ 44.95. A study of the economic, moral, and legal issues surrounding harm resulting from environmental accidents, and compensation and responsibility for this harm.

--Donald Scherer, ed., UPSTREAM/DOWNSTREAM: ISSUES IN ENVIRONMENTAL ETHICS. Philadelphia: Temple University Press, 1990 (November). \$ 37.95. Original essays: Donald Scherer, "The Modeling of Norms and Environments"; Ernest Partridge, "On the Rights

of Future Generations"; Dale Jamieson, "Managing the Future: Public Policy, Scientific Uncertainty, and Global Warming"; Kristin Shrader-Frechette, "Models, Scientific Method, and Environmental Ethics"; Daniel Barstow Magraw and James W. Nickel, "Can Today's International System Handle Transboundary Environmental Problems?"; Mark Sagoff, "Takings, Just Compensation, and the Environment"; Bart Gruzalski, "The Consequences of My Action, Your Action, and the Company's Action"; and Alan Gewirth, "Two Types of Cost-Benefit Analysis." Don Scherer is professor of philosophy at Bowling Green State University and co-edited, ETHICS AND THE ENVIRONMENT, one of the first anthologies in this field.

--Warwick Fox, TOWARD A TRANSPERSONAL ECOLOGY: THE CONTEXT, INFLUENCE, MEANINGS, AND DISTINCTIVENESS OF THE DEEP ECOLOGY APPROACH TO ECOPHILOSOPHY. Boston: Shambhala Publications, 1990, forthcoming.

--Warwick Fox, "On the Interpretation of Naess's Central Term, 'Self-Realization,'" THE TRUMPETER 7:2, Spring 1990. Fox argues that Naess's "self-realization" can be interpreted either in the axiological direction of objective intrinsic value in natural entities or in the identification direction of a psychological experience of cosmological unity. According to Fox, Naess really prefers the identification direction. On the axiological view, "One OUGHT to protect all living beings ... on account of the fact that they are morally considerable (i.e. intrinsically valuable). In contrast, in Naess's formulation ..., one arrives at the view that one WANTS to protect all living beings on account of the fact that one feels deeply identified with them." "What is basic for deep ecologists is the psychological capacity for, and the experience of, wide and deep identification." "At a philosophical or argumentative level, the main writers on deep ecology have adopted an identification based approach in preference to an intrinsic value based approach." Fox is in the Department of Geography and Environmental Studies, University of Tasmania.

--Douglas E. Booth, "Review Essay: The Consequences of the New Environmental Ethics for Economics," REVIEW OF SOCIAL ECONOMY (1990) forthcoming.

--J. Baird Callicott, "Whither Conservation Ethics? in CONSERVATION BIOLOGY vol. 4, no. 1 (March 1990):15-20. Callicott concludes that Leopold advocated "active management for a mutually beneficial human-nature symbiosis, in addition to passive preservation of 'wilderness.' As the human population grows and more nations develop, the best hope for conservation biology lies in a generalization of Leopold's ideal of ecosystems which are at once economically productive and ecologically healthy. The principal intellectual challenge raised by such an ideal for conservation biology is the development of criteria of ecological health and integrity in an inherently dynamic, evolving, and human-saturated biota."

--Keith Ervin, FRAGILE MAJESTY: THE BATTLE FOR NORTH AMERICA'S LAST GREAT FOREST (Seattle: The Mountaineers, 1989).

--THE TRUMPETER 7:2, Spring 1990, is a special issue devoted to ecosophic practices in forestry and farming. Address: P. O. Box 5853 Stn B, Victoria, B. C. V8R 6S8, Canada.

--Keekok Lee, SOCIAL PHILOSOPHY AND ECOLOGICAL SCARCITY (London and New

York: Routledge, 1989). Lee, a philosopher at the University of Manchester, intends this work as the first systematic study of the implications of ecological scarcity for social philosophy. She finds neither of the two major competing social philosophies (capitalism and Marxist socialism) to be adequate, but recognition of the ecological crisis should lead to a frugal mode of socialism which makes fewer, rather than more demands on the absolutely scarce ecological resources.

Recent appraisals of the Yellowstone fires, involving both scientific descriptions of fire behavior and evaluations of fire policy, especially the natural burn policy are:

--BIOSCIENCE, November 1989, vol. 39, no. 10. The whole issue is devoted to the fire impact on Yellowstone. Authors of the seven lead articles and editorials include some two dozen persons intimately involved in the fires. Articles deal with the fires and fire policy, the historical background, issues raised by the fires in landscape ecology, with fires and stream ecosystems, with fires, drought and large mammals, and with interpreting the fires to the public.

--William H. Romme and Don G. Despain, "The Yellowstone Fires," SCIENTIFIC AMERICAN, November 1989, vol. 261, no. 5.

--Paul Schullery, "Theodore Roosevelt: The Scandal of the Hunter as a Nature Lover." Manuscript paper, invited address at the Conference on Theodore Roosevelt and the Birth of Modern America, April 19-21, 1990, Hofstra University, Hempstead, NY. An attempt to evaluate Roosevelt's ethic and practice of hunting and to compare it with shifting attitudes toward hunting in America today. Contact Paul Schullery, Research Division, Yellowstone Park, WY 82190. Phone 307/344-7381, ext. 2110.

--Anthony Weston, "Listening to the Earth," TIKKUN, vol. 5, no. 2, March/April 1990, pp. 50-54. A sensitive meditation on how technologically remade environments close off from us relationships with the natural world, how what we do to food and other domestic animals prevents them from being morally considerable, and how teaching environmental ethics is problematic in built environments. Anthony Weston, Department of Philosophy, State University of New York at Stony Brook, Stony Brook, NY 11794-3750.

--OFFICIAL WORLD WILDLIFE FUND GUIDE TO ENDANGERED SPECIES OF NORTH AMERICA, in two volumes totalling 1200 pages. An expensive, authoritative set (\$ 195) for library reference with a photograph or drawing and descriptions of all 547 U. S. species listed at the time it was written. Plants, birds, and insects are in Volume 1; mammals, herpetofauna, fish, mussels, snails, and crustaceans are in Volume 2. Another book is a softcover list of sources for the photographs of endangered species, \$ 9.00. Contact Beacham Publishing, Inc. 2100 S Street, N. W. Washington, D. C. 20008. Phone 202/234-0877.

--John McCormick, RECLAIMING PARADISE: THE GLOBAL ENVIRONMENTAL MOVEMENT (Bloomington: Indiana University Press, 1989, and London: Belhaven Press). A history of environmentalism on a global scale. \$ 35.00.

--George Wenzel, ANIMAL RIGHTS, HUMAN RIGHTS: ECOLOGY, ECONOMY AND

IDEOLOGY IN THE CANADIAN ARCTIC (London: Belhaven Press, 1990). A critique of the Greenpeace campaign to ban the annual seal-cull by the Inuit community. Claims that environmental activity has oppressed and devastated an indigenous society.

--S. Boehmer-Christiansen and J. Skea, ACID POLITICS: ENVIRONMENTAL AND ENERGY POLICIES IN BRITAIN AND GERMANY (London: Belhaven Press, 1990). Acid rain policies in Britain and West Germany as a key environmental issue of the North Sea region.

--Alexander S. Mather, GLOBAL FOREST RESOURCES (London: Belhaven Press, 1990).

--Michael J. Eden, ECOLOGY AND LAND MANAGEMENT IN AMAZONIA (London: Belhaven Press, 1990)

--The Carnegie Commission on Science, Technology, and Government, in the report of a recent task force, has urged creation of a strong top-level institutional mechanism in the Executive Branch of the U. S. Government to provide environmental policy analysis and direction to the President. The report is entitled E3: ORGANIZING FOR ENVIRONMENT, ENERGY, AND THE ECONOMY IN THE EXECUTIVE BRANCH OF THE U. S. GOVERNMENT. Contact Avery Russell, Carnegie Commission on Science, Technology, and Government, 10 Waverly Place, New York, NY 10003. Phone 212/371-3200.

--R. D. Lawrence, THE WHITE PUMA (New York: Henry Holt). Canadian naturalist R. D. Lawrence, who once spent ten months tracking and observing a puma, has written a novel told largely from the point of view of a puma in the wilds of British Columbia and bearing an important environmental and political message. The story follows the life of an unnamed puma, born with a pure white coat, from birth through a life of persecution by humans. His mother and young litter mate are killed by hunters. Wealthy European hunters lust after his pelt and will pay thousands of dollars for a chance to shoot him. The puma learns to fear and then to hunt his human adversaries. THE WHITE PUMA reminds the wise species that there are other intelligent and worthwhile beings to consider.

--Lukas Vischer, ed., RIGHTS OF FUTURE GENERATIONS, RIGHTS OF NATURE: PROPOSAL FOR ENLARGING THE UNIVERSAL DECLARATION OF HUMAN RIGHTS. Study No. 19 from the World Alliance of Reformed Churches. May 1990. A group of European theologians has proposed that the World Alliance of Reformed Churches enlarge a 1976 declaration of human rights with a similar declaration extended to future generations and to nature. The proposal reads in part: "We support the attribution of rights not only to humans but also to nature, God's creation, and we reject the view that animate and inanimate nature are mere objects which stand at the arbitrary disposal of the human. ...

1. Nature--animate or inanimate--has a right to existence, that is, to preservation and development.
2. Nature has a right to the protection of its ecosystems, species, and populations in their interconnectedness.
3. Animate nature has a right to the preservation and development of its genetic inheritance.
4. Organisms have a right to a life fit for their species,

including procreation within their appropriate ecosystems.

5. Disturbances of nature require a justification. They are only permissible

--when the presuppositions of the disturbance are determined in a democratically legitimate process and with respect of the rights of nature,

--when the interests of the disturbance outweigh the interests of a complete protection of the rights of nature, and

--when the disturbance is not inordinate.

Damaged nature is to be restored whenever and wherever possible.

6. Rare ecosystems, and above all those with an abundance of species, are to be placed under absolute protection. The driving of species to extinction is forbidden."

The proposal is argued in five accompanying papers, including one by Jurgen Moltmann. In German and also in English. Available from the World Alliance of Reformed Churches, 150, route de Ferney, CH-1211 Geneva 20, Switzerland. Phone 22 916237.

--SMITHSONIAN, April 1990, vol. 21, no. 1, is a special issue devoted to the environment. Articles on conservation history, current successes in conversation, clean water, endangered raptors, nature artists, alternative agriculture, rails-to-trails, garbage, trees in cities, urban wildlife, the glare of wasted light on the night sky, and radical environmentalists (principally Dave Foreman and Earth First, but also citing George Sessions and Bill Devall).

## Teaching Materials

The Foundation for Biomedical Research offers various materials defending humane and responsible animal research, some of which can be useful as teaching aids. There are various videotapes on the importance of laboratory animals in product safety testing, on standards for the care of laboratory animals, and on how animal research benefits human health. Posters include: (1) "Demonstrators," a picture of angry demonstrators protesting against animal research, with the caption, "Thanks to animal research, they'll be able to protest 20.8 years longer." (2) "Killers," pictures of three cells: cancer, heart disease, and AIDS. The caption reads, "...Some would like to put an end to animal research. Obviously they don't have cancer, heart disease, or AIDS." (3) "Little Girl," a little girl in a hospital bed surrounded by stuffed animals, "It's the animals you don't see that really helped her recover." Foundation for Biomedical Research, 818 Connecticut Avenue, N. W., Suite 303, Washington, DC 20006.

See ISEE NEWSLETTER, Spring 1990, for various materials available for teaching environmental ethics.

## Videotapes and media

--RACE TO SAVE THE PLANET. Ten one-hour programs for fall 1990 prime-time U. S. television are scheduled, with the first program shown on October 4. With an anticipated audience of 12 million viewers for each of the programs, this is one of the most ambitious public education efforts on the environment. The programs are:

1. The Environmental Revolution
2. Only One Atmosphere
3. Do We Really Want to Live This Way?
4. In the Name of Progress
5. Remnants of Eden
6. More for Less
7. Save the Earth--Feed the World
8. Waste Not, Want Not
9. It Needs Political Decisions
10. Now or Never.

Produced for PBS by WGBH Science Unit and others in the U.S., Australia, India, and Europe, with support from a number of prominent foundations. A 13-week college level course is geared to the series, with two textbooks, and 100,000 high school teachers will receive a teacher's guide. Contact Anne Blackburn, Outreach Coordinator, RACE TO SAVE THE PLANET, WGBH Educational Foundation, 125 Western Avenue, Boston, MA 02134. Phone 617/492- 2777, extension 4374.

The forthcoming Audubon schedule on TBS Superstation is: --BEACHES AND COASTAL POLLUTION, Sunday, September 30; Monday, October 1; Saturday, October 6; Monday, October 15. Hosted by Ted Danson.

--WILDFIRE, Sunday, December 9; Monday, December 10; Saturday, December 15; Monday, December 17.

The forthcoming Audubon schedule on PBS is: All Sundays at 8.00 p.m. EST.

- IF DOLPHINS COULD TALK, July 8
- SEA TURTLES: ANCIENT NOMADS, July 15
- GREED AND WILDLIFE: POACHING IN AMERICA, July 22
- ARCTIC REFUGE: A VANISHING WILDERNESS, July 29
- CRANE RIVER, August 5
- ANCIENT FORESTS: RAGE OVER TREES, August 12. This is the program that angered the timber industry and caused sponsors to withdraw when aired in September 1989. It is being reshown despite efforts to block it.
- WOLVES, August 19
- SHARKS, August 26

Many of these are available on home video for about \$ 30.00 each. Call 800/523-5503.

--GREEN GEMS is a media guide to 70 films on the environment. \$ 6.50 plus \$ 2.00 handling, from Media Network, 121 Fulton St., 5th Floor, New York, NY 10038. Phone 212/619-3455. Another guide, to be published later this summer, will be called SAFE PLANET, \$ 7.50, plus \$ 2.00 handling.

--FOR OUR CHILDREN--PROTECTING CREATION FROM POISON. A 25-minute video on community involvement to fight toxic pollution. Produced by the Eco-Justice working Group of the National Council of the Churches of Christ. \$25 plus \$ 2 postage. Order from Discipleship Resources, 1908 Grand Ave., P. O. Box 189, Nashville, TN 37202.

--THE EARTH BETRAYED: HOW THE U. S. ENVIRONMENTAL PROTECTION AGENCY PROTECTS THE POISONERS--NOT THE PEOPLE. VHS or Beta. \$ 29.95 plus \$ 2.40 Postage. From Organizing Media Project, 1842 Columbia Rd., N. W., Washington, DC 20009. Phone 800/382-0080.

--RESTORING CREATION FOR ECOLOGY AND JUSTICE. VHS. 15 minute video introduction to the crisis of environment and just and sustainable use of the natural world, produced by the Eco-Justice Task Force of the Presbyterian Church (U.S.A.), used in introducing their report but also suitable for general use in a religious setting. 1990. Committee on Social Witness Policy, Presbyterian Church (U.S.A), 100 Witherspoon Building, Louisville, KY 40202. Phone 800/227-2872.

--THE BEAR, a current release in video stores, follows an orphaned grizzly cub who is adopted by a giant grizzly, wounded by a young hunter, who overreacts and shoots out of range. The boar in anger injures the horses of the hunter and his father. Angry in turn, they bring horses to track the boar and the boar, cornered, kills a favorite dog. Meanwhile, the cub is captured by the hunters. Stalking the boar, the young hunter lets down his guard again and, though he might have been killed by the angry boar, is spared. In turn, the hunter spares the life of the boar and releases the cub. Set in British Columbia in the 1880's, although much of the filming was done in the Pyrenees. Majestic scenic backgrounds and some remarkable filming (and training and simulating) of grizzlies. An opening panel notes that all injuries to animals in the film have been simulated. Anthropomorphizes the bears, and is not a reliable source of grizzly ecology. (The owl is a European owl as are the finches). But could be useful in discussing hunting.

--IN THE BLOOD is a documentary film about safari hunting in Africa and a celebration of big game hunting in general. Produced by George Butler, a gifted documentary filmmaker, the controversial film has been released this spring. Butler was raised in Somalia and Kenya when hunting was a natural way of living in the great, broad grassland. Robin Hurt, a white African hunter in Tanzania, seeks to convey the integrity of the hunting experience, and is convinced that without well-regulated sport hunting the animals are doomed, since otherwise the animals have no sustainable value to the African peoples. Kenya banned hunting in 1977 and elephants have since much declined there. Formerly hunters killed about 200 bulls a year from an elephant population of about 160,000. When game officials no longer patrolled the bush, poachers moved in. Theodore Roosevelt IV and his son were originally to be featured in the film, but Roosevelt became uncomfortable with the film, for several reasons, demanding that an episode in which he shot a lion under doubtful circumstances be removed from the film, and disliking the hunting of an endangered crocodile. Another initial promoter of the film, Bartle Bull, now calls it "environmentally fraudulent." One participant in the filming was burned to death when fires, set to burn grasslands and produce new green growth to attract game, raged out of control. In the climax to the film, Hurt takes Tyssen Butler, 11-year old son of the film maker, out for buffalo

and the boy makes the kill. Tyssen wipes tears from his eyes, and Hurt acknowledges that it is both a sad and a great moment. He streaks blood on the boy's face and says, "After this day, you will never be the same." Another claim is that "killing is a way of taking responsibility for what you eat." See story in OUTSIDE, May 1990.

--ONE SECOND BEFORE SUNRISE: A SEARCH FOR SOLUTIONS. Actress Lynn Redgrave hosts this hour long look at innovative people who have improved their environments. Aired on PBS on February 18, 1990. Available through Bullfrog Films, Inc., Oley, PA 19547. 800/543-FROG.

--The Wilderness Society has produced a 13 minute videotape, "Ancient Forests," on the rapid destruction of the ancient forests in the U. S. Pacific Northwest. Another, similar videotape has been made by Lighthawk, see below. The videotape is available, probably free to educational institutions from The Wilderness Society, 1400 Eye Street, N. W., Washington, D. C., 20005. Contact Kathy Kilmer, Public Affairs. Phone 202/842-3400.

--Lighthawk, a group of conservationist pilots, has filmed "The Ancient Forests," 8 minutes. Dramatic overflights of clearcut areas, contrasted with pristine lands. The Wilderness Society tape has fewer of these overflight scenes of devastation, more persons interviewed pro and con, and some especially good scenes of the spotted owl. Lighthawk videotape is for sale (1/2 inch VHS) for \$ 25.00, from Project Lighthawk, P. O Box 8163, Santa Fe, NM 87504-8163. Phone 505/982-9656.

--"The Continuing Forest," 28 minutes, produced by Caterpillar, Inc., defends multiple uses of the national forests. For sale (1/2 inch VHS) for \$ 20, plus \$ 3.50 shipping from Modern Talking Pictures Service, 5000 Park Street North, St. Petersburg, FL 33709. Film # AEVN1615. Phone 800/237-4599. This tape played back-to-back with either of the two above makes a stark contrast, certain to stimulate discussion.

--The Western Canada Wilderness Committee has produced CARMANAH FOREVER a 30-minute video about Carmanah Valley, the home of the world's tallest known Sitka spruce, defending the ecological significance of this outstanding old growth rainforest. Carmanah Valley is located on the west coast of Vancouver Island and is the home of Canada's tallest tree. To save the giant spruces in the mid-valley, the entire watershed must be left unlogged. The Committee advocates that Carmanah Valley be added to the adjacent Pacific Rim National Park. The video also covers the precedent-setting court case and looks at the bad logging practices that are occurring all over British Columbia. \$ 12.95 VHS. The Committee also publishes some remarkable posters and other conservation materials. Ask for a catalog. Western Canada Wilderness Committee, 20 Water Street, Vancouver, BC V6B 1A4, Canada.

--The Video Project distributes over 120 programs, videotapes and films, on the environment. Some titles: THE GREENHOUSE CRISIS, THE RUSH TO BURN (hazardous wastes), WHERE HAVE ALL THE DOLPHINS GONE?, BUILDING BOMBS, MAN OF THE TREES (a New Zealander dedicated to preserving forests), A THOUSAND CRANES (Siberian cranes), CHANGING TIDES ALONG THE MEDITERRANEAN (death of the Mediterranean), DARK CIRCLE (nuclear weapons), THE RIVER THAT HARMS (uranium wastes in New Mexico),

EARTH FIRST: THE STRUGGLE FOR THE AUSTRALIAN RAINFOREST, THE WIPP TRAIL (radioactive wastes), and ENVIRONMENT UNDER FIRE: ECOLOGY AND POLITICS IN CENTRAL AMERICA. The Video Project, 5332 College Avenue, Suite 101, Oakland, CA 94618. Phone 415/655-9050.

Other videotapes are included in preceding announcements. See also ISEE Newsletter, Spring 1990.

## Issues

There is an initiative to establish a National Institutes for the Environment, modeled after the National Institutes of Health. A committee in support includes former Environmental Protection Agency chief William D. Ruckelshaus, biologist Thomas Lovejoy of the Smithsonian Institution, Stephen H. Schneider of the National Center for Atmospheric Research, Harvard biologist E. O. Wilson, and World Resources Institute president Gus Speth. See story in SCIENCE, 10 March 1990.

The National Oceanic and Atmospheric Administration (NOAA) is being revived, after eight years of being strangled by the Regan Administration. There is a new administrator, John Knauss, and new budgets for new and revived programs, in particular for the Sea Grants program, which funds marine research at universities, and for research in climate and global change, including modeling of greenhouse warming. See story in SCIENCE, 8 June 1990.

U. S. Secretary of Interior Manuel Lujan has drawn protests for suggesting that a \$ 200 million telescope should be built despite its potential effect on an endangered subspecies of squirrel. At issue is the Mount Graham red squirrel. All that are left, fewer than 100, are in a colony on the mountain in Arizona where the Smithsonian Institution, the University of Arizona, and others want to build a telescope and observatory. Lujan asked, "Do we have to save every subspecies?" He said that the Endangered Species Act is "just too tough" and added, "We've got to change it." The Secretary was interviewed May 10, 1990, attending a National Park Foundation banquet at Mesa Verde National Park, Colorado. The case is of interest because it involves two institutions otherwise committed to environmental conservation and the squirrel is only a subspecies. The U. S. Endangered Species Act clearly permits listing subspecies, although the extent to which all diversity in natural populations can or ought to be preserved is unclear. Independently of the squirrel, however, the mountain ecosystem is of interest because it is one of the few places that the Mexican and Canadian floras meet within a range of a few miles. At least 22 unique life forms (plants, animals, mollusks, and insects) have evolved here in genetic and geographic isolation on this desert "sky-island" mountain over the past 11,000 years. Another troublesome point is that the University of Arizona managed a doubtful exemption from the need to file an environmental impact statement.

The Smithsonian Institution has established an Office of Environmental Awareness. An initial production is a poster, "Smithsonian Tips to Help Yourself and the Planet." Contact that office at the Smithsonian Institution, Washington, DC 20560.

The Mexican government has passed legislation to end all exploitation of endangered sea turtles.

The presidential decree is seen as a major blow to the Japanese trade in sea turtle products. Mexico has the world's greatest variety of sea turtle species. Six of the world's seven species of sea turtles nest on the Pacific and Atlantic coasts of Mexico.

Global warming is under much debate. Recent discussion has emphasized the uncertainties involved, due to the lack of adequate data and adequate models. Some claim that changes in cloud cover will enter feedback loops that reduce warming. Many are concerned that satellite data be better used. For an introduction to the technical issues, see ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol. 24, no. 4, April 1990.

Plantlife, a new conservation group that aims to protect the plants of Britain and the rest of the world, has been launched. Contact Dr. Jane Smart, Plantlife, c/o Conservation Foundation, 1 Kensington Gore, London, SW7 2AR, United Kingdom.

Andrew Brennan reports that Bill McKibben's THE END OF NATURE (British edition, London: Viking, 1990) has created quite a stir in the United Kingdom and Europe.

The United States Fish and Wildlife Service has published an updated plant candidate list containing 2,099 species (or taxa) thought to be endangered, threatened, or of concern in the United States. The list is in the 55 FEDERAL REGISTER No. 35, February 21, 1990, pp. 6184-6229. An earlier list was published June 16, 1976, 41 FEDERAL REGISTER, No. 117, pp. 24524-24572. The earlier list contained about 1700 taxa. Comparison of the lists shows that large numbers of plants have gone unprotected for fourteen years. Approximately 1400 taxa are newly listed as candidates. Approximately 60 taxa have been declared extinct, some of which were probably already extinct in 1976. About 650 taxa have been dropped because they have been found more common than previously thought. Several hundred dropped taxa have been merged with other taxa as a result of taxonomic revisions. Contact Faith T. Campbell, National Resources Defense Council, 1350 New York Avenue, N. W., Washington, DC 20005. Phone 202/783-5917.

Imports of endangered orchids and cacti from Mexico into the United States rose alarmingly in 1989. About 75,000 cacti were imported, of which 34,000 are considered endangered, rare, or overexploited in Mexico. About 17,700 orchids were imported, of which 6,500, collected in the wild, are threatened or rare in Mexico. Contact Faith Campbell, address above.

Three U. S. tuna canners, including the world's largest, said on April 12 that they will no longer buy or sell tuna captured along with dolphins. Environmentalists have long sought to protect dolphins from fishing nets. Yellowfin tuna school under the dolphins and the dolphins, used to locate the tuna, are accidentally caught in the nets, and killed when the nets are drawn in. Fishermen are supposed to back down the nets to allow the dolphins to escape, but often this is not done or does not work. An estimated 100,000 of the mammals die annually when they are trapped in tuna nets. The actions were announced by companies selling the StarKist (H. J. Heinz), Bumble Bee, and Chicken of the Sea (Van Camp Seafood) brands. An active letter writing campaign and a growing consumer boycott of the companies was a factor in the decision, as also has been adverse media exposure. StarKist will put a "Dolphin Safe" logo on its cans, and reports that it may charge slightly more to cover higher costs. The decision also applies to tuna

used for pet food. Heinz also has announced that it will not purchase tuna caught using gill or drift nets, because the nets indiscriminately trap birds, sea turtles, dolphins and other marine life along with the intended catch. Heinz has also announced a recyclable plastic ketchup bottle.

The importing of monkeys for primate and medical research has been nearly stopped, not by animal rights protests but by the monkeys' contamination by a virus that may (or may not) be dangerous to public health. About 16,000 to 20,000 cynomolgus monkeys were formerly imported each year. Research continues from domestic stocks, but pharmaceutical companies, which require large numbers to manufacture and test vaccines, are in trouble. African Green and rhesus monkeys are also involved. Monkeys can still be imported but the quarantine and testing criteria are so strict that few or none are being imported. Shirley McGreal of the International Primate Protection League says, "Animal protection people have been trying for years to stop the monkey trade. Now a little virus has done it for us." She hopes that the outcome, when the trade is resumed, will be better conditions for the monkeys that are imported. Story in SCIENCE, June 1, 1990. Joining the Earth Day celebration, John Cardinal O'Connor of New York added a note of caution. He said that he supported Earth Day but the accent had to be clear. Rather than focus on "snails and whales," the focus must be on "the sacredness of the human person." "The earth exists for the human person and not vice versa." Citing several recent papers, including a 1988 study by the World Bank, he said, "I do not think the total number of people in the world is an ecological and environmental problem." But he added, "The ecological crisis is a moral crisis." And until "we've developed respect for the human persons, we are not going to have respect for our planet." Earth Day was a time "to express our gratitude to God the Creator" for the world "he has given us for our use, not abuse." Story in NEW YORK TIMES, April 23, 1990. On Ash Wednesday, 4,000 Roman Catholics published a "pastoral letter" in the NEW YORK TIMES calling for church reforms and citing the "threatened environment" as the leading topic for discussion.

The General Assembly of the Presbyterian Church (U.S.A), meeting May 29-June 3 in Salt Lake City, passed by an 86% vote a report on environmental justice Task Force that contained such recommendations as: vigorously to protect remaining wetlands; placing the burden of proof that water quality is not degraded on those who discharge wastes; stop cutting remaining pristine forests on public lands; prohibit trade in endangered wild animals and endangered plants, or products derived from them; recycling and reduction of wastes; promotion of international agreements to stop ozone depletion and global warming; a reevaluation of practices on church owned lands; and including in seminary education a stewardship of creation that respects wildlife and wildlands and promotes biological conservation. Contact Dieter Hessel, Presbyterian Church (U.S.A), 100 Witherspoon Street, Louisville, KY, 40202-1396.

The Jewish Theological Seminary of American produced a television program on faith and the environment that was aired April 29 on NBC. Reform and Reconstructionist Jews have produced a "Greening the Holidays" packet and other environmental materials.

Two bills in Congress (HR 2696, Representative Barbara Boxer; HR 2948, Representative Mel Levine) would require labeling of tuna products so that consumers can know if marine mammals have been killed.

The National Marine Fisheries Service has announced that explosives will be banned in the U. S. tuna fleet, because explosives damage the dolphin's sensitive sonar, vital to their survival. The ban will extend to foreign fleets exporting tuna into the United States. The tuna industry is opposing the ban.

The Ancient Forests Protection Act of 1990 (HR 4492) was introduced into the U. S. Congress on April 4 by Representative Jim Jontz and 23 other U. S. Representatives. The bill would create an ancient forest reserve system, provide interim protection, and mandate a Council of Environmental Quality study on perpetuating ancient forest ecosystems. The bill seeks interim and long term protection for all ecologically significant ancient forests on federal lands. Following the Endangered Species Act, an Endangered Ecosystems Act has been proposed, and the Ancient Forest Protection Act is a step in that direction.

Cabinet-level Department of the Environment? The U. S. House of Representatives passed on March 28 a bill elevating the Environmental Protection Agency to a cabinet level Department of the Environment. The bill, which was introduced by Representative John Conyer, Democrat from Michigan, passed 371-55. The Senate must now address the bill, which includes language that has President George Bush threatening to veto. That language would force federal facilities--including the nation's highly polluting nuclear weapons factories--to comply with government hazardous regulations. Other controversial provisions include an independent bureau of environmental statistics in the new Department of the Environment.

Bills introduced into the U. S. House and Senate (HR 1676, Representative Barbara Boxer, Democrat from California, and S 891, Senator Harry Reid, Democrat from Nevada) would ban federal agencies from using LD50 tests results on animals to determine product safety, labeling, or transportation requirements. Both bills would require agencies to review and justify other continued animal toxicity tests. Non-animal tests must be used unless the agency head finds them to be less valid and puts a notice in the Federal Register with a comment period.

A bill (HR 2766) introduced by Representative Ed Towns, Democrat from New York, would extend the Animal Welfare Act to include mice, rats, and birds.

A bill (HR 5) introduced by Representative Andrew Jacobs, Democrat from Indiana, would express the sense of Congress that federally funded school lunches should provide a meatless option.

A bill (S 727) introduced by Senator Howell Heflin, Democrat from Alabama, forbids various criminal acts against animal research facilities and makes it illegal for anyone, even journalists, to possess or use materials taken by theft or deception from such facilities.

A bill (HR 3270), the Farm Animal and Research Animal Facilities Protection Act, introduced by Representative Charles Stenholm (Democrat from Texas) would make break-ins and vandalism against animal research facilities a federal offense subject to a maximum of three years in prison and/or a fine of up to \$ 10,000. Another bill (HR 3349), the Health Facilities Protection and Primate Center Rehabilitation Act, introduced by Representative Henry A.

Waxman, Democrat from California, makes criminal assaults on federally funded facilities a federal offense.

Two bills (HR 1465 and S686) deal with oil spill liability legislation. They would require double hulls on all new tankers and retrofitting with double hulls on existing tankers, a \$ 1 billion liability fund to be provided by the oil industry for cleanup, equal liability for spills to be shared by oil owner and tanker owner, and an independent Presidential task force to study the Trans-Alaskan pipeline. Exxon especially protests the double hulled tankers, but Conoco has already announced that it will be buying double hulled tankers from now on.

The Clean Air Act up for renewal in the U.S. Congress, the first real face-lifting in thirteen years. It is being hotly fought over at every stage of the debate. For an update, phone the Clean Air Hotline, maintained by Environmental Action, 202/745-4884.

A step toward regulating U.S. environmental impact abroad was taken on April 24th when Senator Frank Lautenberg's (Democrat-New Jersey) bill, S 1089, cleared the Senate Environment Committee. It will be debated before the full Senate in the summer. This bill would apply the National Environmental Policy Act (NEPA) of 1969 to U.S. government actions overseas, making federal agencies consider the impact of their actions outside the U.S. on global climate change, depletion of the ozone layer, transboundary pollution, biodiversity and other international environmental concerns. The State Department, the Department of Interior and the military have all blocked it, and many other Senators have holds on the bill. Similar, but weaker, legislation (HR 1113) has already been passed by the House of Representatives. This bill was attached to HR 3847, the bill elevating the EPA to Cabinet- level status.

In a North Carolina hazardous waste case, the right of a state to enact hazardous waste laws that are tougher than federal standards has been established. On April 11, U. S. Administrative Law Judge Spencer T. Nissen formally recommended that the Environmental Protection Agency drop its controversial effort to block a tough North Carolina waste law, passed in 1987, that puts strict limits on the siting of hazardous waste treatment facilities upstream from drinking water supplies.

In mid-June the U. S. Supreme Court ruled unanimously in a Massachusetts case that the federal government may impose severe fines against air polluters, even when regulators are slow to decide on clean air proposals.

The Episcopal Church has established a group to study environmental issues. Contact the Office of Stewardship, National Episcopal Church, 315 2nd Ave., New York, or Stuart Phillips, 4121 Clovercroft Road, Franklin, TN 37064.

Alan Drengson is launching an Ecostery Foundation of North America to promote ecosophy and the establishment of ecosteries, which are places, centers, facilities, stewarded lands, and nature sanctuaries, where ecosophy (ecological wisdom and harmony) is learned, taught, and practiced. Contact Alan Drengson, Associate Professor of Philosophy at the University of Victoria, B. C., Canada V9W 2Y2.

Henryk Skolimowski will become the first holder of the Chair of Ecological Philosophy established in Poland as a joint enterprise of Warsaw University, Warsaw Agricultural University, and Warsaw Institute of Technology. The chair will focus on systematic research on the conceptual, social, and moral problems underlying the ecological crisis. This is being announced as the first such chair in the world. A series of three international conferences on ecological philosophy are planned for October 1991, October 1993 and October 1995, to be held at the Royal Castle in Warsaw. The 1991 conference includes addresses by the Dalai Lama, Gro Bruntland, Mother Teresa, Arne Naess, Thomas Berry, Murray Bookchin, and others. Skolimowski has been earlier associated with the Program in Humanities, College of Engineering, University of Michigan, Ann Arbor. For further information contact Professor Henryk Skolimowski, 1002 Granger, Ann Arbor, MI 48104. Phone 313/665-7279.

On March 30, the Global Forum on the Environment, held January 15- 19 in Moscow, released the Moscow Declaration and Plan of Action. There are 50 recommendations, with proposals, for building public and political awareness, broadening and deepening understanding of the environment, relieving poverty, managing resources, and controlling development. Specific legislative actions are suggested. At the Moscow meeting about 1,000 participants were involved from 83 countries in an event cosponsored by both the Soviet Academy of Sciences and the Moscow Patriarchate of the Russian Orthodox Church. Some notable speakers were Senator Al Gore, Jacques Cousteau, Carl Sagan, Elie Wiesel and Mikhail Gorbachev. For details contact the primary sponsor, the Global Forum of Spiritual and Parliamentary Leaders on Human Survival, 304 East 45th Street, 12th Floor, New York, NY, 10017.

Californians have placed on their November ballot the most sweeping environmental initiative ever considered by U.S. voters. The Environmental Protection Initiative, commonly called the "Big Green Initiative," easily gathered over 700,000 signatures, nearly twice the required number. The 39-page initiative would ban all pesticides used on food if they include chemicals known to cause cancer and birth defects no matter how they may be diluted. Foods grown outside the state could not be sold within it if treated with such chemicals. It would also phase out chemicals depleting the atmosphere's protective ozone layer, limit emissions of gases adding to the greenhouse warming effect, protect old-growth redwood forests, prohibit oil drilling within three miles of shore except in national emergencies and establish a \$ 500 million fund for oil-spill prevention and cleanup through a 25-cent-a-barrel fee paid by oil companies. Agricultural industries oppose the issue and have countered with a CAREFUL measure, Californians for Responsible Food Laws, which is likely also to be on the ballot.

The First Annual World Championship Prairie Dog Shoot has drawn protest in Colorado. The Ten Ring Gun Club of Nucla and Naturita, towns in far western Colorado, plans a July 14-15 shoot with prizes to shooters who kill the most prairie dogs from the most distance. The event is legal, and the Colorado Wildlife Commission, though willing to consider a ban on hunting contests that award prizes, has declined to prohibit this event, since it has power to change regulations in less than 120 days only in emergency situations. Governor Roy Romer and a local state legislator have urged the club to call off the event, but in a local plebiscite residents of the area voted 317 to 4 to proceed with the shoot. State law bans contests involving the killing of big game, but other contests are unregulated. Bruce McCloskey, deputy director of the Colorado Division of Wildlife, says, "The key issue to this whole thing is whether it is appropriate to

encourage killing of animals in contests." Mountain States Legal Foundation, a Colorado-based conservation law firm, has set up an eco-terrorist hotline for reporting environmental terrorism. The number is 303/TESTIFY, which stands for "Tell of Environmental Sabotage and Terrorism Interfering with Freedom--Yours." The chief legal officer, William Perry Pendley, is anxious to offset what he considers media glamorization of the groups, "They all treat these people as some modern-day Robin Hoods. ... I think that is a terrible disservice to the American people ... who could be the victims of these people." The first chief legal officer of Mountain States Legal Foundation was former U. S. Interior Secretary James Watt. Alleged environmental sabotage has included sand in Caterpillar crankcases, trees "vaccinated" with spikes against the logger's saw, and cattle killed in wilderness areas.

The Wildlife Society is drafting a position statement on "Responsible Human Use of Wildlife," which will be presented for adoption at its October 1990 meeting in Bozeman, Montana. A preliminary position statement (one typeset page in length) has been prepared and comments have been invited from the membership. The statement is stewardship oriented, protecting the numerous values that wildlife carry for humans, although no human uses are permitted that threaten the integrity of a species for long-term survival. Ecosystem integrity is also protected. Request a copy from Position Statements, The Wildlife Society, 5410 Grosvenor Lane, Bethesda, MD 20814. The Wildlife Society is the principal professional society in wildlife management in North America with 8,400 members, including also many international members in 40 different countries.

The professional policy statements of the Wildlife Society have been much more sensitive to ethical issues than have those of the Society of American Foresters, among whom there has also been a recent call for the adoption of a land ethic. Present policy statements of The Wildlife Society say, "The Society believes that wildlife, in their many forms, are basic to the maintenance of a human culture that provides quality living and variety of experience," and that objectives of the Society are "to undertake an active role in preventing human-induced environmental degradation" and "to increase awareness and appreciation of wildlife values." (Brief Policy Statement) "The common aim of mankind should be to perfect processes for deriving support from the environment without destroying its stability, diversity, productivity, or aesthetic values." The policy of the Society is to "seek support for ethical restraints in the use of living natural resources." (Conservation Policies, pp. 2-3) These policy statements can be used in discussions in classes in environmental ethics.

The Conference on Preparing to Manage Wilderness in the 21st Century, meeting April 4-6, 1990 in Athens, Georgia, has issued "The Athens Resolution." The resolution most strongly recommends that the Society of American Foresters adopt a comprehensive land ethic statement in its Code of Ethics, as well as adopt a policy recognizing wilderness as a national resource having multiple public purposes as stated in the Wilderness Act. The resolution also calls on Congress, when it designates wilderness, to specify more adequately the significant nonrecreational values there, and also to designate wilderness with an objective of adequate preservation of representative ecosystems within the United States. For a copy contact Patrick Reed, Southeastern Forest Experiment Station, Forestry Sciences Laboratory, Carlton and Green Streets, Athens, GA 30602.

The U. S. Public Health Service has established an Office of Animal Research to defend and monitor animal research. The Alcohol, Drug Abuse, and Mental Health Administration is working through its Office of Science Education to respond to animal activism. The main figure behind both initiatives is Frederic Goodwin, head of the ADAMHA, who calls the program, "Scientists Fight Back." ADAMHA now is notifying grantee institutions that grants cannot be returned to the government in response to animal rights pressure. If that happens, all PHS grants to the institution will be reviewed. This is to prevent what happened at Cornell University two years ago when a grant approved by the National Institute on Drug Abuse was returned following pressure from animal activists.

A vegetarian sophomore and biochemistry major at the State University of New York at Stony Brook, Jennifer Routh, has refused to dissect preserved frogs in a biology class, a requirement of the class, and is suing the university claiming that the requirement violates her First Amendment rights. Routh is willing to dissect earthworms, starfish, and sea urchins, also requirements in the class, but draws the line at frogs. She also rejected the option of observing while a partner did the dissecting. This is the first case of this kind involving a university. Brief stories on this and the preceding item in SCIENCE, May 18, 1990.

## Recent and Upcoming Events

April 7. San Francisco Bay Area Conference on Christianity and Ecology. A one day conference to help churches identify their ecological responsibility. Sponsored by the North American Conference on Christianity and Ecology. Contact NACCE, P. O. Box 14305, San Francisco, CA 94114. Phone 415/626-6064.

April 19-20. Symposium on Wilderness Areas: Their Impact. Logan State University, Logan, Utah. 84322.

April 19-22. The American Assembly, Arden House, Columbia University, New York. The theme this year was "Preserving the Global Environment: The Challenge of Shared Leadership." About 75 U.S. and international leaders participated.

May 16-18. Inter-Continental Conference on Caring for the Creation, at the Washington Cathedral and the Omni-Shoreham Hotel in Washington, D. C. Sponsored by the North American Conference on Religion and Ecology. Featured speakers included Lester Brown of Worldwatch Institute, Carl Sagan and Langdon Gilkey on science and religion joining hands to save the environment, Jessica Mathews of the World Resources Institute, Noel Brown of Jamaica and the United Nations Environment Programme, William K. Reilly, EPA Administrator, Senator Albert Gore, Jr., and Prince Philip, Duke of Edinburgh. A preconference Symposium included Albert J. Fritsch, Jürgen Moltmann from Tübingen University on human rights and the rights of nature, Kenneth Boulding, Timothy C. Weiskel of Harvard University, and Holmes Rolston. Contact Dr. Donald D. Conroy, North American Conference on Religion and Ecology, 5 Thomas Circle, NW, Washington, DC 20005. Phone 202/462-2591.

May 19. A Festival of Creation, at the Washington Cathedral in Washington, DC. Contact: Canon Michael Hamilton, The Washington Cathedral, Mount Saint Alban, Washington, DC

20016.

May 16-19. American Association for the Advancement of Science, Southwestern and Rocky Mountain Division, met at Colorado Springs, Colorado, with the general theme, "Planet Earth: Strategies for the Future." A Keynote addresses included Jack Carter, The Colorado College, "Moving Society from a Homocentric to an Ecocentric Perspective"; Robert W. Cornell, National Science Foundation, "The U. S. Scientific Strategy for Addressing Global Change"; Peter Robinson, University of Texas at El Paso, "Steward- ship: Past and Future."

May 16-19. "Third Symposium on Social Science in Resource Management," College Station, TX. The theme was: "Human-Resource Interactions: An Interdisciplinary Inquiry." Keynote addresses were by Jack Vaughn, Senior Natural Resources Advisor with USAID Regional Office for Coordination of Agricultural Projects in Guatemala, and John Hendee, Dean of the College of Forestry, Wildlife and Range Sciences at the University of Idaho, and author of the text WILDERNESS MANAGEMENT. Contact: James H. Gramman, Department of Recreation and Parks, Texas A&M University, College Station, TX 77843, 409/845-4920.

May 18-20. Greater Yellowstone Coalition, at Teton Village, Wyoming.

May 21-25. Wilderness Management School for United States Forest Service Personnel. Gila Wilderness/Willow Creek, New Mexico. Holmes Rolston participated as part of the faculty. The Gila Wilderness was the first area to be set aside as wilderness, at the urging of Aldo Leopold. Adjacent is the Leopold Wilderness.

May 21-23. The Ecological Economics of Sustainability: Making Local and Short-Term Goals Consistent with Global and Long-Term Goals, at the World Bank, Washington, DC. An international, interdisciplinary conference sponsored by the International Society for Ecological Economics and others. Contact Dr. Robert Costanza, Coastal and Environmental Policy Program, Center for Environmental and Estuarine Studies, University of Maryland, Solomons, MD 20688-0038.

May 31-June 3. Thirty-Sixth Annual Convention of the College Theology Society, at Loyola University of the South, New Orleans, LA, on the theme, "Ecology in Theological Perspective." Plenary speakers: Matthew Fox, Paul Santmire, Patricia Mische, and Rosemary Radford Ruether. A workshop prior to the convention, May 29-31, explored the topic, "Teaching Ecology and Religion," and included a plenary address by Jay McDaniel, "The Interface of Religion and Ecology." Contact: Terry Tilley, Department of Religion, Florida State University, Tallahassee, FL 32306-1029. Phone 904/644-9879.

May 29-June 3. The General Assembly of the Presbyterian Church (U.S.A) received and passed a report prepared by its Eco-justice Task Force. The Assembly met in Salt Lake City, Utah. See further detail above.

May 31-June 1. The 1990 Annual Conference of the Association for Canadian Studies had the theme "To See Ourselves/To Save Ourselves: Ecology and Culture in Canada." It was held at the University of Victoria, B. C. Contact Susan Hoeltken, Association for Canadian Studies, C. P.

8888, Succ. A, Montreal, Quebec H3C 3P8. Phone 514/987-7784.

June 2-3. Environmental Sabbath. The annual environmental sabbath encourages observance by all religious groups. Sixty thousand copies of an environmental sabbath booklet were distributed to religious leaders. This observance, which originated in Judeo Christian communities, is now extending elsewhere in the world, where it is also called the Earth Rest Day. Contact the United Nations Environment Programme, Room DC2- 0803, United Nations, New York, NY 10017.

June 7-9, "Moral Philosophy in the Public Domain," Applied Ethics in Business, Medicine, and Environmental Policy. University of British Columbia, Vancouver. Speakers included Kenneth Goodpaster, Alison Jaggar, James Rachels, Peter Singer, Robert Soloman, and others. Contact Department of Philosophy, University of British Columbia, Vancouver, BC V6T 1W5.

June 8-10. "Towards an Ecological Education: Social Ecology, Higher Education and Community Action," conference at Goddard College, Plainfield, Vermont. Contact Daniel Chodorkoff, Goddard College, Plainfield, Vermont 05667. Phone 802/454-8311.

June 10. March for the Animals, Washington, DC. A march from the Washington Monument to the Capitol. Contact: National Alliance for Animals' Educational Fund, P. O. Box 2978, Washington, DC 20013-2978. Phone 703/684-0688.

June 17-22. Institute in Culture and Creation Spirituality Summer Workshop, at Omega Institute, Rhinebeck, NY. Seminars by Matthew Fox and others. Included a solstice celebration with musician Paul Winter. Contact the ICCS, P. O. Box 19216, Oakland, CA 94619.

June 19-20. Society for Conservation Biology, University of Florida, Gainesville, FL. Contact: Dr. Stephen R. Humphrey, Department of Wildlife and Range Sciences, University of Florida, Gainesville, FL 32611, 904/392-1721.

June 18-22. National Association of Hazardous Waste Generators National Conference, at San Diego, California. Included several workshops and presentations on the right to know by individuals and communities, workers and citizens, legal and moral aspects. Contact Robert McCarty or Chris Collins, phone 215/683-5098. Mail to National Association of Hazardous Waste Generators, P. O. Box 308, Kurtztown, PA 19530.

July 13-15. Christian Conference on the Environment in Sydney, Australia. Contact Christian Conference on the Environment, P. O. Box E266, St. James, NSW 2000, Australia. July 13-16. ISEE session at the Joint Session, July 13-16, University of Essex, moderated by Andrew Brennan. See details earlier.

August 16-21. Conference on Environmental Ethics and Sustainable Development, at Estes Park, Colorado. Participants include Baird Callicott, Frances Moore Lappe, Bryan Norton, Jack Weir, Max Oelschlaeger, Pete A. Y. Gunter, Holmes Rolston. Contact Pete A. Y. Gunter, Department of Philosophy, University of North Texas, Denton, TX 76203-3496.

August 30-September 1. "Ethics and Environmental Politics," First International Conference, at Borca di Cadore, Italy. Borca di Cadore is a village and conference site near Padova. Three featured addresses are: Franz Bockle, Moral Theology, University of Bonn, "Environmental Ethics: Philosophical and Theological Foundations"; Sebastiano Maffettone, Professor of Political Philosophy, University of Palermo, "Ethics in Environmental Policy-Making"; and Kenneth E. Boulding, University of Colorado, Emeritus, "Environmental Ethics and the Earth Economic Systems." Others lectures are by Kristin Shrader-Frechette, Philosophy, University of South Florida, Antonio Autiero, Moral Theology, University of Bonn, and Laura Westra, Philosophy, University of Windsor. Professor Giorgio Ruffolo, the Italian Minister for Environment, will take part in the conference. There will be simultaneous translation in English and Italian. Contact: Dr. Corrado Poli, Fondazione Lanza, via Dante, 55, 35139 Padova, Italy. Phone (49) 34034. A North American contact is Dr. Peter Timmerman, the Secretariat, Human Dimensions of Global Change Programme, IFIAS, 39 Spadina Road, Toronto, Canada M5R 2S9. Phone 416/926-7570.

October 5-7. Fourth International Conference of the Biopolitics International Organization, Athens Greece. See details earlier.

September 21-23. Andrew Brennan and Hans Peter Durr symposium on environmental ethics at the British Society for the Philosophy of Science, Wolfson College, Cambridge. See details earlier.

September 23-28. Valuing Natural Resources, a conference at the Banff Centre for Management, Banff, Alberta. With particular emphasis on assessing environmental tradeoffs, there is an expert faculty on environmental evaluation techniques and policies. Expensive, \$ 1,795, but set in the Canadian Rockies and there are scholarships available for Canadians. Contact Program Coordinator, Resource Management, The Banff Centre for Management, Box 1020, Banff, Alberta T0L 0C0, Canada. Phone 403/ 762-6327.

October 13-19. Conference on "Natural Areas and Yosemite: Prospects for the Future," at Yosemite National Park and the Sheraton Hotel and Conference Center, Concord, California. Papers are invited. A keynote address is by Gilbert Grosvenor, President of the National Geographic Society. The conference is part of the Yosemite Centennial Celebration, and includes six plenary sessions with prominent speakers, as well as field trips to a number of San Francisco Bay natural areas. Contact The Yosemite Fund, 155 Montgomery Street, # 1104, San Francisco, CA 94104 or Coordinator, NA/Yosemite Centennial Symposium, CGNRA, Fort Mason Bldg. 201, San Francisco, CA 94123.

October 19-21. "Earth and Spirit," addressing the spiritual dimensions of the environmental crisis. An international conference sponsored by the Chinook Learning Center at Seattle, Washington. Conference presenters include Thomas Berry. Contact Chinook Learning Center, Box 57, Clinton, WA 98236. Phone 206/321-1884.

October 22-25. "Biodiversity and Landscapes: Human Challenges for Conservation in the Changing World," a conference sponsored at Pennsylvania State University featuring a diverse group of wildlife professionals, economists, sociologists, artists, ecologists, paleontologists,

engineers, and including philosophers Eugene Hargrove, Bryan Norton, Holmes Rolston, George Sessions, and Carl Mitcham. Contact Deb Hagar, Event Coordinator, Biodiversity and Landscapes, Center for Biodiversity Research, Environmental Resources Research Institute, 117 Land and Water Building, The Pennsylvania State University, University Park, PA 16802. Phone 814/863-0050.

November 11-14. "National Symposium on Urban Wildlife," Stouffer Five Seasons Hotel, Cedar Rapids, IA. Contact: Dr. Lowell Adams, National Institute for Urban Wildlife, 10921 Trotting Ridge Way, Columbia, MD 21044.

December 27-30. ISEE annual meeting and session at the American Philosophical Association, Eastern Division, Boston, MA. See details earlier.

February 1991. World Council of Churches conference at Canberra, Australia, on the theme, "Come Holy Spirit, Renew Creation."

February 14-19, 1991. ISEE session at the American Association for the Advancement of Science, Washington, D. C. See details earlier.

February 28-March 3, 1991. "The Environment and the Mechanized World," American Society for Environmental History Conference at the University of Houston. A call for papers has been issued, deadline September 15, 1990. Themes include ethical issues resulting from modification of the natural world by agriculture, commerce, industrialization, and urbanization. Contact Martin V. Melosi, Program Chair, ASEH Conference, Department of History, University of Houston, TX 77204-3785. Phone 713/749-2967.

March 12-15, 1991. Biodiversity of the Rocky Mountains. A Symposium at Colorado State University, sponsored by College of Forestry and Natural Resources, CSU, U. S. Fish and Wildlife Service, U. S. D. A. Forest Service, National Park Service, the Nature Conservancy, and the Audubon Society. The symposium will feature several prominent keynote speakers, multiple paper sessions, and other media presentations. A call for papers has been issued. Contact for paper abstract submission: Fritz L. Knopf, U. S. Fish and Wildlife Service, National Ecology Research Center, 4512 McMurray Ave., Fort Collins, CO 80525. If interested in an ISEE panel at this symposium, contact Holmes Rolston, III, Department of Philosophy, CSU, Fort Collins, CO 80523. For early registration, contact Biodiversity Symposium, Office of Conference Services, Colorado State University, Fort Collins, CO 80523.

March 28-30, 1991. ISEE session at the Pacific Division, APA, in the San Francisco Bay area. See details above.

April 27-30, 1991. ISEE session at the Central Division, APA, in Chicago. See details above.

May 10-12, 1991. "Earth Ethics Forum '91: Green Visions and Pathways for the 3rd Millennium" to be held at Saint Leo College, Saint Leo, Florida. A call has been issued for papers in environmental ethics relating to philosophy, religion, education, sociology, economics, business, and Third World development. Contact Saint Leo College, Department of Religious

Studies, P. O. Box 2127, Saint Leo, FL 33574-2127. Phone 813/397-9042.

May 14-19, 1991. International Conference on Science and the Management of Protected Areas. Acadia University, Wolfville, Nova Scotia. A call for papers has been issued. Contact Neil Munro, Director, Policy Planning and Research, Canadian Parks Service, Atlantic Region, Environment Canada, Historic Properties, Halifax, Nova Scotia, Canada B3J 1S9.

June 9-14, 1991. "Human Responsibility and Global Change," International Conference on Human Ecology, at Goteborg, Sweden. Sponsored by the University of Goteborg, The Royal Swedish Academy of Sciences, and others. Contact Maj-Lis Foller, Department of Human Ecology, University of Goteborg, Viktoriagatan 13, S-411 25 Goteborg, Sweden. Phone +46 (31) 631310

October 1991. Henryk Skolimowski conference at the Royal Castle in Warsaw, Poland. See details earlier.

June 1992. United Nations Conference on Environment and Development to be held in Brazil.