

General Announcements

"Environmental Justice--Global Ethics for the 21st Century." Conference in Melbourne, Australia, October 1-3, 1997, hosted by the School of Architecture, Building and Planning of the University of Melbourne, with Professor Nicholas Low as director. The scope of the meeting was unusual; speakers and presenters represented all continents and a vast number of disciplines and perspectives, in plenary sessions, semi-plenaries and concurrent sessions. Arne Naess gave the starting keynote address, followed by a plenary session on "The Future of Capitalism and the Environmental Crisis" led by Vandana Shiva (India) and Elmar Altvater (Germany) and Clive Hamilton (Australia).

A semi-plenary on the first day was devoted to "Global Integrity and the Earth Charter" by presenters Laura Westra (Canada), Vittorio Falsina (The Rockefeller Foundation), and Brendan Mackie (Australia). Other semi-plenaries raised questions about feminism, environmental justice and globalization. David Harvey (U.S.A.), Karen Warren (U.S.A.) and R. Rao (India) conducted a plenary, "Towards a Universal Ethic?"

The most controversial plenary took place when Peter Singer (Australia), Tom Regan (U.S.A.) and Val Plumwood (Australia) addressed "The Application of Alternative Conceptions of Ethics to Nature and Humanity." Regan's impassioned plea for vegetarianism was applauded, but both Regan and Singer were attacked from the floor for neither changing nor adapting their argument to accommodate ecofeminist critiques of traditional moral theories. Robert Bullard (U.S.A.), Kristin Shrader-Frechette (U.S.A.) and Marcia Langton (Australia) viewed environmental justice from separate, but converging perspectives of African-American issues, geographical and intergenerational justice in regard to nuclear power, and aboriginal issues in Australia, respectively.

The final day began with a plenary on "Indigenous Perspectives of Nature and Justice" by Australian presenters, followed by another plenary, "Transnational Institutions" by John Dryzack (Australia) and Oran Young (U.S.A.). Lectures followed on animal rights by Tom Regan and Val Plumwood, and the last semi-plenary was "Environmental Justice: New Principles" with Susan Armstrong (U.S.A.) and Freya Matthews (Australia).

ISEE presenters included Johan Hattingh, David Schmitz, Teresa Kwiatowska, Ronnie Hawkins, Andrew Light, Peter Wenz, Jan Wawrzyniak, Patricia Werhane, Karen Warren, James

Sterba, Lois Ann Lorentzen, Nigel Dower, and Wouter Achterberg. The hospitality, weather, and sights were unforgettable, especially the tour to the Great Ocean Road, the Fairy Penguins on Phillip Island, and kangaroos in the fields. (Thanks to Laura Westra.)

CALL FOR NOMINATIONS for ISEE Secretary. Nominations are requested for the position of Secretary of ISEE. The term of office is three years, beginning July 1, 1998, and ending June 30, 2001. The election will be held by mail-in ballot in early 1998. Please submit the names of nominees to any member of the Nominating Committee by December 31, 1997. For more information, see "ISEE Business and Announcements" below. Members of the Nominating Committee are: Prof. Victoria Davion, Chair (University of Georgia), Prof. Alan Holland (Lancaster University, UK), Prof. Roger Paden (George Mason University), Prof. Gary Varner (Texas A&M University); see below for addresses.

William G. Kaschak has been named Executive Director of the Jane Goodall Institute in a move crucial to the ongoing Institute. He has a Ph.D. in social anthropology from the University of Massachusetts, and has held various international positions with USAID and the Bureau for Africa AID. Most recently, was Director of International Operations for Teledyne Economic Development.

Weathervane is a website that tracks the political directions of the debates on climate change policy: <http://www.weathervane.rff.org>. The site is sponsored by Resources for the Future.

The Harvard University Seminar on Environmental Values has received a four-year grant of \$ 191,600, part of a \$ 2.4 million grant from the V. Kann Rasmussen Foundation to fund activities of the Committee on Environment. The Seminar is directed by Timothy C. Weiskel, an interfaculty program of the Harvard Divinity School's Center for the Study of Values in Public Life. Over the next four years, the Seminar plans to coordinate more work on environmental ethics at the Divinity School and across the university. A conference on environmental justice is planned, and the consecutive themes of the four years are: Water; Air; Land; and New Century, New Science, New Values. A web site is: <http://divweb.harvard.edu/csvpl/ee/>

Shinto and Ecology Conference. This conference was sponsored by the Harvard University Center for World Religions, notable for the number and stature of Shinto authorities coming from Japan to America to participate in the conference. Keynote addresses: Sakurai Katsunoshin, "The Sacredness of Mountains and Groves. Mr. Sakurai is director of the Board of Trustees, Kogakkan University and former High Priest of Taga Taisa. Sonoda Minoru, "The Religious

Culture of the Forest Archipelago." Dr. Sonada is a faculty member at Kyoto University and High Priest of the Chichibu Shrine. More detail in a report by Mary Evelyn Tucker and John Grim, Harvard University Center for the Study of World Religions News, Vol. 4, no 2 (Spring 1997).

The Web of Creation site is an ecumenical website offering eco-justice resources for religious communities: <http://www.webofcreation.org> Contact: Web of Creation, 1100 E. 55th Street, Chicago, IL 60615. Tel: 773/256-0774, David Rhoads. E-mail: webofcreation@istc.edu

Jobs in environmental affairs for students. The Student Conservation Association coordinates information about career opportunities for professionals working to protect the land and the environment. They publish Earth Work: Resource Guide to Nationwide Green Jobs, as well as periodic lists of positions available. Volunteer positions and fellowships are also listed. Also available, job information on hotline via e-mail. Also twenty other conservation career books are handled in their resource department. If you are on campus, you or your career office should be in touch with them. Student Conservation Association, P. O. Box 550, Charlestown, NH 03603-0550. 603/543-1700. Fax 603/543-1828. e-mail: earthwork@sca-inc.org. Website: www.sca-inc.org

The Coalition on the Environment and Jewish Life (COEJL) seeks to build a Jewish movement to heal the planet, with two dozen participating Jewish organizations. There are multiple activities at locations around the United States, publications, and other resources. Coalition on the Environment and Jewish Life, 443 Park Avenue South, 11th floor, New York, NY 10016-7322. 212/684-6950, ext. 210. Fax 212/686-1353. Email: coejl.aol.com Website: www.jtsa.edu/org/coejl

Websites on animal rights and related issues. A list of several dozen of these is maintained by Stephen R. L. Clark at: <http://www.liv.ac.uk/~srlclark/animal.html>

David Abram has received the Lannan Literary Award for Non-Fiction (\$50,000) for his book, *The Spell of the Sensuous: Perception and Language in a More-than-Human World* (New York: Pantheon, 1996).

SciCentral is a directory of science and engineering resources conceived and created by professional scientists. The aim of SciCentral is two-fold: to aid the science community by enabling direct and efficient access to the most valuable Internet resources, and to prepare a platform for communication between scientists and engineers so that they may work together to solve the complex research problems confronting people today. Use of SciCentral is free.
Address: <http://www.scicentral.com>

Jacques Yves Cousteau died on July 25, 1997 at age 87. A pioneering marine conservationist, Cousteau opened the eyes of the world to the oceans. Thanks to him, millions now know that we live on an ocean planet; the marine environment is most of our world, an environment he defended with passion, eloquence, and vision.

The US Congress passed the International Dolphin Conservation Act on July 31, strengthening existing dolphin protection legislation. In exchange for entry into the U.S. tuna market, nations party to the Panama Declaration (the relevant international agreement) will be legally required to place independent international observers on each tuna vessel to monitor the fishery. Fishing operators must employ fishing procedures designed to eliminate dolphin mortality and to conserve the tuna fishery.

Carol Becker, Dean of Faculty at the Art Institute of Chicago, spoke at the meeting of the Mountain-Plains Philosophy Association, October 3, 1997, at the University of Colorado at Colorado Springs. Her presentation was on "Art, Ecology, and the Future of Progress."

A new journal, *Ethics, Place, and Environment*, will be launched in 1998 by Carfax Publishing, Ltd. Edited by Tim Unwin (Royal Holloway, University of London), James Proctor (University of California, Santa Barbara) and Iain Hay (The Flinders University of South Australia), the journal will provide a forum for the publication of research and scholarship on all aspects of geographical and environmental ethics. Included will be research on ethical issues, animal rights, questions of justice in urban society, development ethics, cartography, and the construction of cultural values. Volume 1, 1998, 2 issues, ISSN 1366-879X. For an inspection copy of the first issue, contact Carfax Publishing, Ltd., 875-81 Massachusetts Ave., Cambridge, MA 02139 USA. Tel: 800-354-1420. Fax: 617-354-6875. Email: sales@carfax.co.uk. Website: <http://www.carfax.co.uk/epe-ad.htm>

The Bahai Office of the Environment for Taiwan (Taipei) is dedicated to Agenda 21 and its implementation in Taiwan, especially "community action" encouraged by the local

"Environmental Protection Administration". Actions for citizens, but also for government institutions and businesses, are suggested. For example, recommendations for citizens for "Environmental Lifestyles" include switching off the pilot light of the boiler and avoiding disposable paper products. For business and government, examples include using air-conditioners and heaters efficiently and introducing cleaner vehicles. See "The Turning Point," No. 15, August 1997.

The Other Economic Summit (TOES) was held in June 1997 in Denver, CO, on the theme "Working Alternatives: A World That Works." Since 1984, The Other Economic Summit (TOES) has convened to debate alternatives to the official agenda being addressed by the government leaders at the Group of 7 Economic Summit. The key messages from Denver have been compiled by Trent Schroyer (Ramapo College of New Jersey) into a book entitled *A World That Works: Building Blocks for a Just and Sustainable Society* (New York: Bootstrap Press, 1997), 368 pp., US \$ 19.50. The book has over thirty-five papers. It and several other TOES books are available from Bootstrap Press, 777 UN Plaza, Suite 3C, New York 10017 USA, Tel: 1-800-316-2739, Email: cipany@igc.apc.org. For more information about TOES, contact Betty Little, P.O. Box 292, Killington, VT 07920 USA, Email: BettyLittle.parti@ecunet.org; or Trent Schroyer, Professor of Sociology-Philosophy, Institute for Environmental Studies, Ramapo College of New Jersey, 505 Ramapo Valley Road, Mahwah, NJ 07430 USA, Tel: 201-529-7740, Fax: 201-529-7508, Email: tSchroye@ultrix.ramapo.edu.

CONFERENCES AND CALLS FOR PAPERS

ISEE Programs at the American Philosophical Association:

--Eastern Division, Marriott Hotel, Philadelphia, PA, December 27-30, 1997:

Session One. Topic: Current Issues in Environmental Ethics. Chair: Andrew Light (University of Montana). Speaker: Bill Throop (Green Mountain College), "On the Elimination of Exotic Species," Commentator: Gary Varner (Texas A&M University). Speaker: Robinson Lilienthal (New Jersey Institute of Technology), "The Unabomber Case: Ecoterrorism and Environmental Ethics," Commentator: Edwin Hettinger (College of Charleston).

Session Two. Topic: Ecology and Environmental Philosophy. Chair: Laura Westra (University of Windsor). Speaker: Mark Sagoff (University of Maryland at College Park), "Impediments to a Theoretical Ecology," Commentators: Greg Cooper (Duke University), Richard Burian (Virginia Polytechnic and State University).

Session Three. Co-sponsored by ISEE and the Society for the Advancement of American Philosophy (SAAP). Topic: Pragmatism and Environmental Philosophy. Chair: Jennifer Welchman (University of Maryland at Baltimore). Speakers: Bryan G. Norton (Georgia Institute of Technology), "Pragmatism, Adaptive Management, and Sustainability"; Robert L. Hood (Bowling Green State University), "Why There Isn't Unity Among Environmentalists"; Eric Katz (New Jersey Institute of Technology), "A Pragmatic Reconsideration of Anthropocentrism."

--Central Division, Palmer House, Chicago, IL, May 6-9, 1998:

Session One. Topic: Recent Works in Environmental Ethics. Chair: Laura Westra University of Windsor (Canada). Speakers: Michael Mark, Austin Peay State University (TN), "Environmentalism with a Liberal Face"; Philip Cafaro, Southwest State University (MN), "Thoreau on Science and System"; Bruce Morito, University of Guelph (Canada), "Examining Ecosystem Integrity as a Primary Mode of Recognizing the Autonomy of Nature"; Laura Westra, University of Windsor (Canada), "The Ethics of Integrity: A Response to Bruce Morito."

Session Two. Topic: Author Meets Critics--Eric Katz's Nature as Subject: Human Obligations and Natural Community. Chair: Andrew Light, University of Montana. Speakers: Ned Hettinger, College of Charleston, Wayne Ouderkirk, Empire State College (SUNY). Respondent: Eric Katz, New Jersey Institute of Technology.

--Pacific Division, Bonaventure Hotel, Los Angeles, CA, March 25-28, 1998: Program will be in the next issue of the Newsletter.

The World Congress of Philosophy. The World Congress of Philosophy meets at Copley Place in Boston, MA USA, August 10-16, 1998, and the program has been required to be set up considerably in advance. Here is what is planned in environmental ethics (contributed papers submitted to the Congress, but not through ISEE, are not listed below):

World Congress, Main Program, Congress-invited speakers. Topic: "Philosophy and the Environment." Chair, Robin Attfield. Speakers: John Passmore (Australian National University), Robin Attfield (University of Wales, Cardiff), Holmes Rolston, III (Colorado State University)

Subsection organized by Robin Attfield. Azizan Baharuddin (University of Malaya, and Institute for Policy Research), Heta and Matti Häyry (University of Helsinki), Gunnar Skirbekk (University of Bergen).

Sections organized by ISEE.

Section I. Organized by Jack Weir (Morehead State University), invited addresses. Chair, Jack Weir. Theme: Approaches to Environmental Ethics (intended to be introductory to current issues, for philosophers not otherwise acquainted with environmental ethics). Speakers: J. Baird Callicott (University of North Texas, President ISEE), "Is There a Need for a New, an Environmental Ethic?" Richard Sylvan (at the 15th World Congress, 1973, Varna, Bulgaria): "Quarter Century Retrospective"; Ronnie Zoe Hawkins (University of Central Florida); Alan Holland (University of Lancaster, U.K., Editor, Environmental Values); Val Plumwood (Australia).

Section II. Organized by Mark Sagoff (Institute for Philosophy and Public Policy, University of Maryland at College Park), invited papers. Part One: Chair, Mariachiara Tallacchini (University of Milan, University of Firenze); Speakers: Eric Katz (New Jersey Institute of Technology); Eugene Hargrove (University of North Texas, Editor, Environmental Ethics), "Traditional Environmental Ethics." Part Two: Chair, Eugene Hargrove; Speakers: Kristin Shrader-Frechette (University of South Florida); Laura Westra (University of Windsor, Canada).

Section III. Organized by Holmes Rolston from contributed papers. Chair, Holmes Rolston (Colorado State University). Speakers: Andrew Light (University of Montana), "Economic Goods, Human Needs, and Environmental Values"; Ricardo Rozzi (Universidad de Chile and Institute of Ecological Research, Chile), "Ecological-Evolutionary Concepts of Nature and their Relationship to Environmental Ethics"; Jan Wawrzyniak (Adam Mickiewicz University, Poland), "Where Do All the Flowers Stand? An Attempt at Evolutionary Axiology"; Andrew McLaughlin (Lehman College, City University of New York), "Globalization and the Environment"; Teresa Kwiatkowska-Szatzscheider (Universidad Autonoma Metropolitana-Iztapalapa, Mexico), "Environmental Ethics in Tropical Rainforests."

CALL FOR PAPERS: American Philosophical Association, ISEE Group Sessions. The annual deadlines for paper submissions for the ISEE sessions regularly held at the three divisional meetings of the American Philosophical Association are:

Eastern Division: February 1st

Central Division: September 1st

Pacific Division: September 1st

For specific dates and locations, see "Events" (below).

--Submit Eastern Division proposals to Kristin Shrader-Frechette (ISEE Vice President-President Elect), Department of Philosophy, University of South Florida, 4202 East Fowler Avenue, CPR 259, Tampa Florida 33620 USA; Tel: 813-974-5224 (Office), 813-974-2447 (Dept); Fax: 813-974-5914. For the December 1999 meeting: Two sessions are being planned: recent important

books on environmental ethics, and submitted papers. Please send proposals and papers as soon as possible.

--Submit Central Division proposals to Laura Westra (ISEE Secretary), Dept of Philosophy, University of Windsor, Windsor Ontario N9B 3P4 CANADA; Tel: 519-253-4232; Fax: 519-973-7050.

--Submit Pacific Division proposals to Ernest Partridge, P.O. Box 9045, Cedar Pines Park, CA 92322 USA. Tel: 909-338-6173. Fax: same as telephone, but call first. Email: gadfly@igc.org

CALL FOR PAPERS. "Wilderness Science in a Time of Change." University of Montana, Missoula, May 23-27, 1999. Possible topics include wilderness values, policy, ethics, and science, changing societal definitions of wilderness, wilderness management. Contact: Natural Resource Management Division, Center for Continuing Education, University of Montana, Missoula, MT 59812. 406/243-4623. 888/254-2544 Email: ckelly@selway.umt.edu.
www.wilderness.net

CALL FOR PAPERS. A conference on "Environmental Issues in Ancient Greek Philosophy" will be convened in late August 1998 in Greece (Athens and Island of Samos), by Tom Robinson (University of Toronto) and Konstantin Bourdouris (University of Athens). For information, contact Laura Westra, ISEE Secretary, address below.

ISSUES

Some sobering facts and figures. From Global Connections: A National Conversation About a Changing World (circulated in a mailing endorsed by Madeline Albright):

--Two of every three people on the planet have never made a telephone call.

--For just 10% of the world's annual military expenditures--or about \$80 billion more per year--we could lift every family on the planet out of poverty and provide everyone with basic services like health, education, and safe water.

--2.9 billion people--or two-thirds of the developing world and upwards of half the people on Earth--have no access to a toilet, not even a pit latrine.

--80% of the world's population have incomes of less than \$700 a year. The ratio of the income of the top 20% to that of the poorest 20% has more than doubled in recent decades--from 30:1 in 1960 to 78:1 in 1994.

--Private foreign investment in the developing world has soared in the past few years, from \$30 billion in 1987 to \$160 billion in 1995. But the vast majority of this went to a handful of nations; less than 3% went to all of sub-Saharan Africa.

--Americans spend less of their income on food than anyone else in the world--down from 21% in 1940 to 11% in 1996. Millions of people worldwide spend as much as 70%.

--Donations to international causes have fallen more than 10% in the past two years, even as overall charitable giving rose. The \$2 billion donated to international affairs groups is the lowest for any sector, representing just 1.3% of all charitable contributions.

--Sources: Harper's Index, 5/97; UN Development Programme ACDA; New York Times 1/9/97; Inter-Church Coalition on Africa, UNDP Human Development Report 1997; Washington Post 12/31/96; Newsweek, World Food Program; Giving USA. Contact InterAction, 1717 Massachusetts Ave. NW, Suite 801, Washington, DC 20036. Phone 202/667-8227, ext 117. Fax 202/667-8236. E-mail: gc@interaction.org. Web: www.interaction.org. Use password "worldviews."

Unique, all-taxa survey in Costa Rica fails. A promising survey of all the species in species-rich Costa Rica, designed co-operatively among a number of groups, including the World Bank, the Netherlands, and Norway, has failed, rather unexpectedly. One spokesman said, "The ATBI (survey) was a beautiful scientific project, but there are social and economic considerations that are more relevant than scientific ones." The \$ 90 million project was canceled because it seemed to benefit science more than the Costa Rican people. Jocelyn Kaiser, "Unique, All-Taxa Survey in Costa Rica 'Self-Destructs,'" *Science* 276 (1997)893.

Jungle technology in the Amazon. Raytheon has signed a \$ 1.4 billion agreement with Brazil for surveillance and monitoring of the Amazon region, the largest contract Brazil has ever negotiated with a foreign company. The U.S. Export-Import Bank is loaning 75 percent of the money. Raytheon, a well known defense contractor, is putting its expertise to work to track what's going on in the tropical rainforest, which is 60 percent of Brazil's territory. Also Raytheon wonders whether environmental security will not be as important in the future as military security. The system is known by the acronym SIVAM, roughly translated as System for the Vigilance of the Amazon. On the ground, there are planned 13 radar stations, six mobile radars, 25 radar units, 10 weather stations, 200 air and water quality monitors, eight mobile sensors, three data-processing

centers, a command center and enough portable computers to outfit hundreds of villages with fax and e-mail capabilities, all in addition to the use of satellites and airplanes for monitoring. Curiously, the high tech system will be monitoring, among other things, native tribes that have no written language and no formal monetary system. The system can also spot unauthorized mining, burning, and hunting, spot smuggler's planes and contraband and monitor previously inaccessible borders, as well as locate oil, mineral, and timber resources. One spokesman says: "The resources there will ultimately be tapped; the population of the world demands it. What the government really has to manage is the greed factor."

Lichen stops logging. The presence of the lichen *Nephroma occultum* has forced the US Bureau of Land Management to postpone the sale of timber from a 120-acre tract in Oregon at least until there can be a detailed survey of lichens on the tract. The lichen was found by an Oregon State University graduate student, Abbey Rosso, in the high canopies of 500 year old Douglas firs and sugar pines, 200 feet high. The species was not previously known there, but is one that President Bill Clinton's forest plan stipulates must be protected, partly because it is "a good indicator of ecological community." This is the first instance in the U.S. of a timber sale being delayed by a protected lichen. Brief story in Audubon, Sept.-Oct., 1997.

Surplus chimps. US biomedical researchers hold about 1,800 chimpanzees that are largely not needed in research, about 200 of them infected with H.I.V. It was once thought that the infected chimps would soon die and could serve as models for human research, but this proved largely wrong, although, many years later, a few chimps do seem to be catching the disease. Others were used by the Air Force four decades ago to establish that humans could live in space. The chimps can live 50-60 years. Costs and care of the chimps is increasingly an issue, and younger researchers less and less comfortable with using them in research, for ethical reasons. Frederick Coulston and his Coulston Foundation control 650 of the animals and seek to do continued research, amid growing controversy. Berreby, David, "Twists and Turns in Chimp AIDS Research," and "Unneeded Lab Chimpanzees Face Hazy Future," New York Times, February 4, 1997, p. A1, C8.

Environmental degradation in China. The transformation of the Chinese economy is proceeding more rapidly than almost any nation in history. But its future remains shadowed by a fragile financial system, the absence of meaningful rule of law, growing corruption, and staggering levels of pollution, says a World Bank Report. A consequence of China's meteoric economic growth that now threatens sustained development is the country's alarming level of air and water pollution. Five of China's largest cities, including Beijing, Chongqing, and Guangzhou, are among the most polluted cities in the world. Not only does China suffer as many as 289,000 deaths a year because of high pollution levels, the country is also losing an estimated three to eight percent of its annual gross domestic product because of environmental degradation. --

Edward A. Gargan, "Weakness Seen in China's Economic Boom," *New York Times*, September 19, 1997, A5. See also the Vaclav Smil entry in the bibliography.

Wetlands Lost. One million acres of wetlands was lost in the continental U.S. from 1985-1995, despite new protections, according to a U.S. Fish and Wildlife survey. The losses on agricultural lands were especially surprising, 965,000 of these acres, indicating lack of enforcement of wetland protections on the farm. Still, many interpreted the report as good news, since losses in the previous decade, 1975-1985 were three million acres. The loss was about one percent of the wetlands that remain in the lower 48 states, which now have less than half the wetlands that existed in Colonial times. John H. Cushman, Jr., "One Million Acres of Wetlands Was Lost From 1985-1995, Despite New Protections," *New York Times*, Sept. 18, 1997, p. A18.

Children made to order? Genetic enhancement of human traits (more athletic ability, musical ability, lack of baldness) are under study, an outgrowth of therapies first intended to cure diseases, as discussed at the first Gene Therapy Policy Conference of the recombinant DNA Advisory Committee (RAC) of the National Institutes of Health (NIH). About 200 gene-therapy experiments are underway, although most of them are not working very well. Story in *Science*, September 19, 1997, pp. 1753-54.

Superfund revision would prohibit compensation for lost intrinsic value. One of the sticking points in the attempt to reauthorize the Superfund toxic waste law concerns whether companies can be sued for damage to the intrinsic value of natural resources and whether they can be forced to try to restore them. Montana Senator Max Baucus objected to a proposed weakening in the Superfund law by saying it "completely overlooks the intrinsic value of a remote mountain wilderness." The revision would prohibit seeking damages for intangible environmental values that cannot be easily priced. The Assistant Attorney General of New York argues that "unique resources are valuable to society not only for their actual uses as parks, waterways or recreational facilities, but because they just are." A spokesperson for a coalition of industry groups opposed to penalties for long-term environmental restoration says that some lawsuits "are going to attempt to compute the value to the squirrel of having to eat acorns instead of walnuts while restoration is occurring, or the value to a robin of eating bugs instead of worms--and to file claims for the robin's pain and suffering." See John Cushman, "Buried in Measure on Toxic Waste: One Special Offer," *New York Times* (9/5/97): A1.

Planned French canal would link the North Sea with the Mediterranean. A 143-miles long canal with 15 dams, 24 locks and hundreds of bridges would link the Rhine River that flows to the North Sea with the Saone and Rhone Rivers that flow South into the Mediterranean. Promoted for nearly 40 years by the French government, the canal would be three times as long as the

Panama Canal and would cut some villages in two with 25-foot dikes. Local politicians who supported the canal were recently thrown out of office and replaced with canal opponents. While the French government buys up land in the path of the canal, locals split ownership of the land to make it more difficult to acquire or expropriate. One member of anti-canal forces said that if the project is not killed, "We are ready to fight. This canal would make us terrorists." See Charles Trueheart, "Canal Plan in France Stranded," *Washington Post* (7/30/97): A18.

Should Lake Powell be drained? Lake Powell is a 100-miles long lake that straddles the Utah/Arizona border and is formed by the Glen Canyon Dam on the Colorado River. When David Brower, a grandfather of the modern American environmental movement, proposed last year to drain Lake Power, few people took him seriously. Brower has felt guilty for 40 years for dropping opposition to the Glen Canyon Dam as a tradeoff that helped prevent construction of a dam that would have flooded Dinosaur National Monument in Colorado. With unanimous support from the Sierra Club Board of Directors and with backing from a Utah environmental group, the proposal to drain the nation's second largest artificial lake is now getting significant public attention. Utah politicians held Congressional hearings on the proposal in an attempt to embarrass its proponents.

The arguments against removing the dam are strong: Four million people use electricity generated from the dam; the dam provides flood control; the surrounding recreation area is the second most popular camping spot in the nation; 400,000 boats are launched on the lake every year; draining the lake would create a massive environmental mess including odor from millions of rotting fish and a bathtub ring around the redrock shoreline. Those in favor of restoring Glen Canyon argue that the lake causes an 8 percent loss of water through evaporation and seepage into the ground (water whose value is estimated to be \$360 million a year). They point out that dams do not last forever and that eventually the lake will fill with silt. (An engineer who manages the dam claims that dredging will be needed to clear the turbine intake pipes in about 500 years.) The cold water that flows from the 500-foot deep lake, at 47 degrees, is also endangering several warm-water species of fish.

A restored Glen Canyon would support significant recreation and employment opportunities. While many find the lake quite beautiful, Edward Abbey once wrote that "the difference between the present reservoir, with its silent sterile shores and debris-choked side canyons, and the original Glen Canyon, is the difference between death and life. Glen Canyon was alive. Lake Powell is a graveyard." A former commissioner of the Federal Bureau of Reclamation (which built and operates the dam) argues that "Building a dam is the same as constructing a nuclear plant; you get immediate benefits, but you also get huge long-term costs. And a dam, just like a nuclear plant, can leave a legacy of environmental destruction that can take generations to correct." Although drainage of Lake Powell is unlikely, Congress has already agreed to pay to remove two dams on the Elwha River in Washington State to restore a salmon fishery. See James Brooke, "In the Balance, the Future of a Lake," *New York Times* (9/22/97): A10; Daniel P. Beard, "Dams Aren't Forever," *New York Times* (10/6/97): A17. (For another account, see Brad Knickerbocker, "Turning Man-Made Creations Back to Nature," *Christian Science Monitor* 89 (26 September 1997): 1, 5.)

World Population Rate Peaks, UN Claims. World population growth rates have peaked, and population itself may soon peak. So says the United Nations. By 2040, world population will peak at 7.7 billion, which is about 1/3 more people than now. When population finally peaks, several benefits will result, according to economists. Poor nations will be able to shift resources from basic goods like food and shelter to raising the standard of living. Famine will be reduced, especially in Africa and Asia. Immigration into the developed nations will ease. And export markets in the developing nations will burgeon. Environmental pressures will ease. By 2050, the ratio of population between the third world and the developed nations will be 7:1; it's 4:1 now. Pessimists, like Stan Becker of Johns Hopkins, doubt the UN's optimism. Becker expects disasters in poorly managed nations, especially famines, and others doubt whether the "green revolution"--high yields in grains and other foods--can match the population growth. See David R. Francis, "Global Crowd Control Starts to Take Effect," *Christian Science Monitor* 89 (22 October 1997): 1, 9.

Trash--1995 Data and EPA Predictions. According to an EPA report released in June 1997, the US in 1995 had 208 million tons of municipal solid waste, down 1 million tons from 1994. The per capita rate of trash generation was 4.3 pounds per person per day, down from 4.4 in 1994; of this, 1.1 pound per person per day is recycled, leaving 3.2 pounds per person per day that goes to a waste facility. Of the total, 39% was paper and paperboard (81.5 million tons), 14.3% was yard waste (29.8 million tons), and 6.7% (14 million tons) was food. 40% of paper waste was recycled (33 million tons), and 30% of yard waste was composted (9 million tons). By the year 2000, US trash will be 222 million tons, with containers and packaging the biggest portion (36% by 2000). In 1995, 57% of municipal waste went into landfills; 27% was recycled; and 16% was burned. The "landfill crisis" of the 1980s was a hoax; the crisis, such as it was, was caused by tougher regulations, and there never was a lack of landfill sites. But, on the positive side, the crisis gave a big boost to recycling. Story in "More Is Recycled, But There's Also More of It," *Christian Science Monitor* 89 (21 July 1997): 16.

LOGGING RESUMES IN THE DANIEL BOONE NATIONAL FOREST (KENTUCKY). The Kentucky affiliate of the activist organization Heartwood filed in federal court on September 5, 1997, a third lawsuit to stop logging in the Daniel Boone National Forest. A suit filed in early summer suspended logging for 1 1/2 months, until the court ruled that the suspension applied only to the specific area addressed in the suit (199 acres in the Indian Creek area of the Red River Gorge). The current suit contends that all logging should be stopped because the US Forest Service is not following the requirements of the Endangered Species Act, the National Forest Management Act, and the National Environmental Policy Act. The Daniel Boone National Forest has 690,987 acres, and 3,454 acres (or 0.5%) are approved for harvesting annually. The Boone logs are 5% of the states annual harvest, the rest coming from private property. About 200 jobs depend upon the Boone logs and will be lost during any suspension. Since the Forest Service does not pay taxes and in effort to be responsible citizens, the Service donates 25% of the gross

from each sale to the county where the logs are harvested. For instance, Rowan County, which is home to Morehead State University and less dependent upon logging than most counties in Kentucky, gets \$50-60,000 per year. (Hamilton, Kim, "Daniel Boone Under Attack," Morehead News, 16 September 1997, pp. A-1, A-2)

Rolston's Gifford Lectures. Nov. 10-Dec. 1, 1997, University of Edinburgh, Scotland. "Genes, Genesis, and God" is the general title of Holmes Rolston III's Gifford Lectures. Ten lectures will be presented, starting on Nov. 10, on Mondays, Tuesdays, and Thursdays, in Lecture Theatre 5, Appleton Tower, commencing at 5:15 PM. Lectures are free and open to the public. In addition, on Wednesday, 12 November, a seminar on "A Prolific Earth: Genetic and Theological Explanations" will be convened in the General Assembly Hall, New College, Mound Place, Edinburgh. The seminar will feature Prof. Rolston and Prof. R. J. (Sam) Berry, the 1997/98 Gifford Lecturer at the University of Glasgow and a geneticist and ecologist of University College, London. The seminar is also free and open to the public. For more information: Email: Gifford.Lectures@ed.ac.uk

Website: <http://www.admin.ed.ac.uk/arts/docs.giff97.htm>

Yellowstone Institute is a private, non-profit organization operating in partnership with Yellowstone National Park. More than 85 field courses are offered annually, lasting from two to five days, and many are available for graduate, undergraduate, or recertification credit. The courses are taught at the Institute's facilities in the remote Northeastern section of the park and in the back country. Fees average US \$45-50 per day. Topics include natural and cultural history, journal keeping, writing, and photography. For a catalog and more information: The Yellowstone Institute, Box 117, Yellowstone National Park, Wyoming 82190 USA, Tel: 307-344-2294; Website: <http://www.nps.gov/yell/yellinst.htm>

RECENT ARTICLES AND BOOKS

Reminder: Environmental Ethics, Environmental Values, and the Journal of Agricultural and Environmental Ethics are not indexed here, but are included in the annual update on disk and on the website.

--Chadwick, Ruth, editor-in-chief, Encyclopedia of Applied Ethics. 4 volumes. San Diego: Academic Press, 1997. Contains, among others, the following articles: (alphabetically by entry title)

--Mepham, Ben. "Agricultural Ethics"

--Parascandola, Mark. "Animal Research"

--Pluhar, Evelyn. "Animal Rights"

--Rawles, Kate. "Biocentrism"

--Lee, Keekok. "Biodiversity"

--Leopold, Aldo Carl. "Conservation (Stewardship)"

--Munz, Peter. "Darwinism"

--Talbot, Carl. "Deep Ecology"

--Dower, Nigel. "Development Ethics"

--Dower, Nigel. "Development Issues"

--Holland, Alan. "Ecological Balance"

--Burritt, Roger. "Environmental Compliance by Industry"

--Sagoff, Mark. "Environmental Economics"

--Attfield, Robin. "Environmental Ethics, Overview"

--Jarvela, Marja. "Environmental Impact Assessment"

--Talbot, Carl. "Environmental Justice"

--MacDonald, Chris. "Evolutionary Perspectives in Ethics"

--Brennan, Andrew. "Gaia Hypothesis"

--Valadez, Jorge. "Indigenous Rights"

--Booth, Annie L. "Land-Use Issues"

--Mori, Maurizio. "Life, Concept of"

--Daffern, Thomas. "Native American Cultures"

--Allen, Garland E. "Nature vs. Nurture"

--ShraderFrechette (Shrader-Frechette). Kristin. "Nuclear Power"

--Ryder, Richard. "Painism"

--Clark, John P. "Political Ecology"

--Parker, Jenneth. "Precautionary Principle"

--Christman, John. "Property Rights"

--Carpenter, Robert Stanley. "Sustainability"

--Kaplan, Helmut. "Vegetarianism"

--Rollin, Bernard E. "Veterinary Ethics"

--Spash, Clive L. "Wildlife Conservation"

--Dower, Nigel. "World Ethics"

--Bostock, Stephen. "Zoos and Zoological Parks"

--Northcott, Michael S., *The Environment and Christian Ethics*. Cambridge: Cambridge University Press, 1996. 379 pp. \$59.95 (hb); \$21.95 (pb). Of the books on environmental ethics written from a perspective of Christian ethics, Northcott's survey best knows the philosophical literature, in addition to having a thorough familiarity with the theological literature. Northcott sums up his argument: "The resolution of the environmental crisis requires the rediscovery of the existence of value and moral significance in the objective world prior to human acts of valuing, an independence which Western theists have traditionally located in the original act of divine beneficence in the creation of the world. . . . Without a recovery of this traditional recognition of the moral order and purposiveness of the world, prior to its processing by human perception, I do not believe it will be possible for modern societies ultimately to reduce their impacts on the ecological integrity of the nonhuman world" (pp. 92-93). In this search, Northcott is especially interested in philosophical arguments for intrinsic value in nature, which are congenial with this divine creation of value.

Northcott recognizes amply that Christians have sometimes been the cause of environmental degradation; but he also believes that the primal Hebrew vision was "earth friendly" (p. 198), and that early Christianity with its understandings of the redemption of creation was also. The Christ is the Lord of nature, as well as of persons. Northcott argues for what he call a "repristination" of such worldviews (p. xiii, p. 239, p. 255). He has a soft spot for indigenous peoples, of whom he paints a rather rosy picture, and thinks that they were closer to the Hebrew mind than often realized. A central emphasis is on natural law, which Northcott hopes to recover. Northcott teaches Christian ethics at the University of Edinburgh.

--Larrère, Catherine, *Les philosophies de l'environnement (Philosophies of the Environment)*. Paris, Presses universitaires de France, 1997. 124 pages. An overview of largely American environmental philosophy, with discussions of intrinsic value, the land ethic, animal ethics, wilderness and pluralism. Larrère depicts the American environmental debate as involving two opposed tendencies, the search for abstract universal laws (Moralität), and the effort to ground environmental values in the concept of community (Sittlichkeit). The first is an expanded Kantianism, and also found in the animal rights movement. The second is developed in Leopold's land ethics. Catherine Larrère is a philosophy professor and head of the philosophy department at the Université Michel de Montaigne, Bordeaux III, in France. Reviewed by Pete A. Y. Gunter in *Environmental Ethics*, forthcoming.

--Larrère, Catherine and Raphaël Larrère, *Du bon usage de la nature. Pour une philosophie de l'environnement (On the Good Use of Nature: Toward a Philosophy of the Environment)*. Paris. Aubier, 1997. 355 pages. Much longer than the preceding survey, covering the history of Western philosophy and concluding with the authors' proposal for a plausible and workable environmental ethic. A classical (Greek) view of nature recommended that humans learn from the norms of nature and accept natural limits. The modern world makes nature a realm of passive mechanical interactions, valueless, with humans outside and over nature. The authors, in a third, postmodern view, inscribe humans in nature but not in a privileged position. "Good use today should be ecocentric" (p. 19). Against Luc Ferry, *The New Ecological Order*, the authors argue that "to face the environmental crisis we do not need only an ethics of responsibility towards future generations but also a new idea, or scientific, ecocentered vision of nature." Shows that environmental ethics is alive and well in France, and also introduces French and European contributions to the debate with which English-speaking philosophers may not be familiar. Catherine Larrère teaches philosophy at the Université Michel de Montaigne, Bordeaux III, in France. Raphaël Larrère an agronomy engineer and director of research at the Institut National de la Recherche Agronomique (INRA). Reviewed by Pete A. Y. Gunter in *Environmental Ethics*, forthcoming.

--Larrère, Catherine, "La forêt est-elle un objet philosophique?" in *La Forêt, les Savoirs et les Citoyens*, Editions de l'ANCR/Agence nationale de création rurale. Co Mars 1995, Editions ANCR, 73124 Chalon-sur-Saône cedex. With Descartes, and Rousseau and Heidegger as well, the forest in philosophy is a place one has to go out of. The forest is a metaphor of method, of spatial orientation. This attitude that "one should go out of the forest" becomes a philosophical motto that furthers the modern separation between humans and nature.

--Larrère, Catherine, and Larrère, Raphael, eds., *La crise environnementale (The Environmental Crisis)*. Paris: Éditions de l'INRA (Institut National de la Recherche Agronomique), 1997. For sale: INRA Editions, Route de St Cyr, 78026 Versailles-Cédex France.

--Larrère, Catherine, "La nature est-elle aimable? (Is Nature Loveable)," *La Mazarine*, Editions du Treize Mars, 12 boulevard Péreire, 75017 Paris, no. 1, automne 1997. The answer depends upon which nature is in question. The article distinguishes between a nature-artefact, that we are responsible for, and a processual nature, that we can love.

--Passmore, John, "The Preservationist Syndrome," *Journal of Political Philosophy* 3(#1, 1995):1-22. Passmore wishes more consistent use of "conservation" and "preservation." Conservation is future-oriented; preservation is past-oriented. In the rapidly changing modern world, the rise of preservationist interests is striking. Passmore considers urban preservation, ecological preservation, cultural preservation, versus development, the question of "rights" to development, indigenous "rights" to traditional lands, "rights" of animals to be preserved, "rights" of species, whether to say that preservation is "better" is culturally relative, whether preservationists are elitists. The paper, he notes, is a development and generalization of Chapters IV and V in his *Man's Responsibility for Nature* (London: Duckworth, 1980). Passmore is retired, Australian National University, Canberra. He will speak at the forthcoming World Congress of Philosophy, Boston, August 1997.

--Nassauer, Joan Iverson, ed. *Placing Nature and Landscape Ecology*. Washington, D.C.: Island Press, 1997. 179pp. Nassauer is in landscape architecture at the University of Minnesota, Minneapolis-St. Paul. Contains the following articles:

--Gorham, Eville. "Human Impacts on Ecosystems and Landscapes," pp. 15-32.

--Smiley, Jane. "Farming and the Landscape," pp. 33-43.

--Meine, Curt. "Inherit the Grid" (the environmental consequences of the U.S. mapping grid of townships and sections across the continent), pp.45-62.

--Nassauer, Joan Iverson. "Cultural Sustainability: Aligning Aesthetics and Ecology," pp. 65-83.

--Eaton, Marcia Muelder. "The Beauty That Requires Health," pp. 85-106. Eaton is in philosophy at the University of Minnesota.

--Martin, Judith A., Warner, Sam Bass, Jr. "Urban Conservation: Sociable, Green, and Affordable," pp.109-122.

--Karasov, Deborah. "Politics at the Scale of Nature," pp. 123-137.

--Romme, William H. "Creating Pseudo-Rural Landscapes in the Mountain West," pp. 139-161.

--Nassauer, Joan Iverson. "Action Across Boundaries," pp. 163-169.

--Bowers, C. A., *The Culture of Denial: Why the Environmental Movement Needs a Strategy for Reforming Universities and Public Schools*. Albany, NY: State University of New York Press, 1997. The flaws in contemporary education. The complicity of the educational establishment in supporting the social and economic institutions that have produced the environmental crisis. Education from the primary grades through the universities needs to be totally reformed to support new, ecologically sustainable societies. Bowers formerly taught at the University of Oregon and at Portland State University.

--Buege, Douglas J., "An Ecologically-informed Ontology for Environmental Ethics," *Biology and Philosophy* 12(1997):1-20. Since the inception of their subject as a distinct area of study in philosophy, environmental ethicists have quarreled over the choice of entities with which an environmental ethic should be concerned. A dichotomous ontology has arisen with the ethical atomists, e.g. Singer and Taylor, arguing for moral consideration of individual organisms and the holists, e.g. Rolston and Callicott, focussing on moral consideration of systems. This dichotomous view is ecologically misinformed and should be abandoned. In this paper, I argue that the organization of the natural world, as viewed by some ecologists and evolutionary biologists, is structured on various levels that are not reducible to one another. This "hierarchical" view, expressed by Salthe and Eldredge, provides the most complete and accurate ontology for environmental ethics. Buege completed a Ph.D. in environmental ethics at the University of Minnesota, Minneapolis, fall 1993, entitled *Intrinsic Value, Organic Unity and Environmental Philosophy: Grounding our Values*, critiquing existing theories and developing new theories of ontology and intrinsic value with a view to grounding public policy issues. The dissertation advisor was Arthur Caplan, and Karen Warren, of Macalaster College, St. Paul, was a chief mentor. He is now an independent scholar, West Allis, WI.

--Robinson, William S., "Some Nonhuman Animals Can Have Pains in a Morally Relevant Sense," *Biology and Philosophy* 12(1997):51-71. In a series of works, Peter Carruthers has argued for the denial of the title proposition. Here I defend that proposition by offering direct support drawn from relevant sciences and by undercutting Carruthers' argument. In doing the latter, I distinguish an intrinsic theory of consciousness from Carruthers' relational theory of consciousness. This relational theory has two readings, one of which makes essential appeal to evolutionary theory. I argue that neither reading offers a successful view. Robinson is in philosophy at Iowa State University, Ames.

--Sagoff, Mark, "Muddle or Muddle Through? Takings Jurisprudence Meets the Endangered Species Act" *William and Mary Law Review* 38 (no. 3, March 1997):825-993. The long article takes up the entire issue and is book-length. "This Article proposes that the Supreme Court, rather than resolving controversies about the fundamental character of property, liberty, nature, ecology, and so on, appropriately limits itself to reigning in regulation at its own frontier. As long as the Court equally threatens opposing positions with utter and devastating defeat--fanning fears that it may vindicate either the libertarian or the environmentalist extreme--it may succeed in restraining the ambitions of both property owners and regulators, who then may recognize that they have more to lose from confrontation than from compromise and accommodation" (pp. 844-845). "This Article argues that no plausible scientific argument at present supports the claim that the extinction of species in the United States courts environmental disaster. It is far more plausible that rare and endangered species have become epiphenomena, affected by the environment but having little effect on it. Moral, aesthetic, and spiritual arguments amply may justify all that we do to protect every species, but an instrumental or economic rationale appears beyond reach" (p. 844). Sagoff is at the Institute of Philosophy and Public Policy at the University of Maryland, and is the former president of the International Society for Environmental Ethics.

--Mackinnon, Barbara, *Ethics: Theory and Contemporary Issues*, 2nd ed. Belmont, CA: Wadsworth Publishing Co., 1998. Chapter 14 is "Environmental Ethics," and in addition to an introductory essay by MacKinnon contains reprints of Holmes Rolston, "Humans Valuing the Natural Environment" (from Chapter 1 of his *Environmental Ethics*); Karen Warren, "The Power and the Promise of Ecological Feminism"; and Bill Devall and George Sessions, "Deep Ecology." Chapter 15 is "Animal Rights," and in addition to an introductory essay by MacKinnon contains reprints of Peter Singer, "All Animals are Equal," and Bonnie Steinbock, "Speciesism and the Idea of Equality." MacKinnon teaches philosophy at the University of San Francisco.

--*Global Biodiversity* is published four times a year by the Canadian Museum of Nature, with distribution in 90 countries. The editor is Don McAllister. A website is <http://www.nature.ca/english/gbzine.htm>

--Cifric, Ivan, "Anthropocentrism and Naturalism--Bases of Modern Thought?" *Socijalna Ekologija: Casopis za ekolosku misao i sociologijska istrazivanja okoline* (Social Ecology: Journal for Environmental Thought and Sociological Research) 4(1995):5-34. Published in Zagreb, Croatia. The journal is ordinarily published in Croatian, some articles in German or French, but some issues are in English, as is this one. Based on a study of the convictions of Croatian students, finding and analyzing two main bases of modern thought. The first relies on

anthropocentrism, is optimistic, supports progress, projects development. The second is pessimistic, relies on naturalism, and from a moral standpoint contests the existing progress of civilization, advocates saving natural resources, and sees a catastrophic future. Cifric is in the faculty of philosophy, Department of Sociology, University of Zagreb. Other articles in this issue on progress and politics, attitudes toward nuclear power plants, radioactive wastes, and the sense of the quality of life.

--Environmental Challenges to Modern Society. Theme issues of *Socijalna Ekologija: Casopis za ekolosku misao i sociologijska istrazivanja okoline* (Social Ecology: Journal for Environmental Thought and Sociological Research) vol. 5, no. 3 (1996). Published in Zagreb, Croatia, in Croatian. Articles on sustainability, environmental education, waste, ontological and ethical perspectives on environmental protection and ecology, the Croatian strategy of environmental education in the church and at school.

--Milton, Kay, *Environmentalism and Cultural Theory: Exploring the Role of Anthropology in Environmental Discourse*. New York: Routledge, 1996. Environmentalists often claim that non-industrial societies, usually described as "indigenous" or "traditional," have a better relationship with their environment than industrial societies do. A growing body of anthropological literature has thrown doubt on this belief, and suggests that it should be seen as a "myth," both in the popular sense of something that is untrue and in the sense often used by anthropologists as something that is asserted as dogma. Our contemporary understanding of these cultures is shaped by our pre-conceptions and by the arguments we wish to pursue. Both the reality of human-environment relations, and our interpretations of them, are considerably more complex than the environmentalist myth suggests. Milton teaches social anthropology at the Queen's University, Belfast.

--Conley, Verena Andermatt, *Ecopolitics: The Environment in Poststructuralist Thought*. London and New York: Routledge, 1997. 188 pages. Poststructuralist European thought, although often thought to have no concern for the environment, actually has complex but hidden ties to ecology. Conley reviews and rejects the disparagements of ecology by Ferry and Baudrillard, emphasizing rather the explicit ecological aspects of Levi-Strauss's thought. She traces ecological themes through H el ene Cixous and Luce Irigaray, defending a feminist perspective.

--Simpson, R. David, Roger A. Sedjo, and John W. Reid, "Valuing Biodiversity for Use in Pharmaceutical Research," *Journal of Political Economy* 104 (no. 1, February 1996):163-185. The expected value of a new species for pharmaceutical purposes is very low, so low as to make it unlikely that private firms will have much economic incentive to protect species. Also, the loss--measured in human illness or death--caused by the loss of a species is likely to be small.

Even under the most optimistic assumptions, the economic value of saving one species is unlikely to be more than about \$ 10,000, and under typical assumptions the probability that a given species will yield useful discoveries drops its expected value to less than \$ 100. Issues of ecological, moral, or aesthetic values are not here considered.

--Science, 25 July 1997 (vol. 277, no. 5325) is a theme issue on "Human-Dominated Ecosystems." Contains:

--Vitousek, Peter M., Harold A. Mooney, Jane Lubchenco, and Jerry M. Melillo, "Human Domination of Earth's Ecosystems," (pp. 494-499). Human alteration of Earth is substantial and growing. Between one-third and one-half of the land surface has been transformed by human action; the carbon dioxide concentration in the atmosphere has increased by nearly 30 percent since the beginning of the Industrial Revolution; more atmospheric nitrogen is fixed by humanity than by all natural sources combined; more than half of all accessible surface fresh water is put to use by humanity; and about one-quarter of the bird species on Earth have been driven to extinction. By these and other standards, it is clear that we live on a human dominated planet.

--Chapin, III, F. Stuart, et al., "Biotic Control over the Functioning of Ecosystems," (pp. 500-504). Changes in the abundance of species--especially those that influence water and nutrient dynamics, trophic interactions, or disturbance regime--affect the structure and functioning of ecosystems. Diversity is also functionally important, both because it increases the probability of including species that have strong ecosystem effects and because it can increase the efficiency of resource use. Differences in environmental sensitivity among functionally similar species give stability to ecosystem processes, whereas differences in sensitivity among functionally different species make ecosystems more vulnerable to change. Current global environmental changes that affect species composition and diversity are therefore profoundly altering the functioning of the biosphere.

--Matson, P. A., et al, "Agricultural Intensification and Ecosystem Properties," (pp. 504-509). Expansion and intensification of cultivation are among the predominant global changes of this century. Intensification of agriculture by use of high-yielding crop varieties, fertilization, irrigation, and pesticides has contributed substantially to the tremendous increases in food production over the past 50 years. Land conversion and intensification, however, also alter the biotic interactions and patterns of resource availability in ecosystems and can have serious local, regional, and global environmental consequences. The use of ecologically based management strategies can increase the sustainability of agricultural production while reducing off-site consequences.

--Botsford, Louis, et al., "The Management of Fisheries and Marine Ecosystems" (pp. 509-515). The global marine fish catch is approaching its upper limit. The number of overfished populations, as well as the indirect effects of fisheries of marine ecosystems, indicate that management has failed to achieve a principal goal, sustainability. This failure is primarily due to incessant sociopolitical pressure for greater harvests and the intrinsic uncertainty in predicting the harvest that will cause population collapse. A more holistic approach incorporating

interspecific interactions and physical environmental influences would contribute to greater sustainability by reducing the uncertainty in predictions. However, transforming the management process to reduce the influence of pressure for greater harvest holds more immediate promise.

--Dobson, Andy P., et al., A. D. Bradshaw, and A.J.M. Baker, "Hopes for the Future: Restoration Ecology and Conservation Biology" (pp. 515-522). Conversion of natural habitats into agricultural and industrial landscapes, and ultimately into degraded land, is the major impact of humans on the natural environment, posing a great threat to biodiversity. The emerging discipline of restoration ecology provides a powerful suite of tools for speeding the recovery of degraded lands. In doing so, restoration ecology provides a crucial complement to the establishment of nature reserves as a way of increasing land for the preservation of biodiversity. An integrated understanding of how human population growth and changes in agricultural practice interact with natural recovery processes and restoration ecology provides some hope for the future of the environment.

--Noble, Ian R. and Rodolfo Dirzo, "Forests as Human-Dominated Ecosystems," (pp. 522-525). Forests are human-dominated ecosystems. Many of the seemingly lightly managed or unmanaged forests are actually in use for agroforestry or for hunting and gathering. Agroforestry does reduce biodiversity, but it can also act as an effective buffer to forest clearance and conversion to other land uses, which present the greatest threat to forested ecosystems. In forests used for logging, whole-landscape management is crucial. Here, emphasis is placed on areas of intensive use interspersed with areas for conservation and catchment purposes. Management strategies for sustainable forestry are being developed, but there is a need for further interaction among foresters, ecologists, community representatives, social scientists, and economists.

--Malakoff, David, "Extinction on the High Seas" (pp. 486-488). Biologists have long assumed that the oceans are too vast, and their habitats too prolific, for humans ever to extinguish any marine species. But now that assumption is under attack. At the same time, estimates of the number of marine species are escalating, with new discoveries. Only about 275,000 marine species have actually been described, and but estimates for coral reefs alone are at least a million species, and possibly up to 9 million, with another 10 million on the deep sea's expansive floor.

--Noske, Barbara, *Beyond Boundaries: Humans and Animals*. Montreal: Black Rose Books, 1997. 253 pages. Chapters: The Road toward Domestication. Domestication under Capitalism. The Animal Industrial Complex. The Devaluation of Nature. The Question of Human-Animal Continuity. Human-Animal Discontinuities. Meeting the Other: Toward an Anthropology of Animals. Postscript: Andropocentrism or Androcentrism. Noske is a Ph.D. in philosophy from the University of Amsterdam, currently at the Faculty of Environmental Studies, York University.

--Moffat, Anne Simon, "Resurgent Forests Can Be Greenhouse Gas Sponges," *Science* 277 (18 July, 1997):325-316. Recent evidence indicates that forests store much more carbon than had

been thought. Some previous studies calculated that forests take up about as much carbon dioxide while photosynthesizing as they give off when respiring, resulting in little net carbon flow into or out of forests. But new results, some from re-analysis of the old data, indicates that forests and the carbon they sequester have been undervalued, especially the carbon in forest soils, much in peat, also much more than thought in tropical forests. Reforestation can be significant in offsetting industrial carbon.

--Schullery, Paul, *Searching for Yellowstone: Ecology and Wonder in the Last Wilderness*. Boston: Houghton Mifflin, 1997. An insightful history of trying to figure out the meaning of Yellowstone National Park. Yellowstone's "discovery" by whites followed 10,000 years of occupation and use by native Americans, and Schullery can both say that the native Americans were "very aggressive land managers" (p. 11) and, on the next page, that there is a sense in which "these Indians have left fewer enduring evidences of their occupancy than the beaver, badger, and other animals on which they subsisted" (p. 12). A repeated theme throughout the book is that things are more complex than they seem, whether the biology, the politics, or the history. The park's founding became a creation myth for the conservation movement; the image was composed of equal parts of myth, hype, and rare glimpses of the incredible wonder of the place. Yellowstone's image as a peaceful, unchanging American wilderness is belied by a century of bitter debate over what its real purpose should be, as our continually changing relationship with nature has altered our perceptions about wild country. Now surpassing 100 million visitors, Yellowstone can become a global conscience, a barometer of the health of the planet. Schullery has served Yellowstone Park in several capacities, including park historian, chief of cultural resources, and senior editor in the Yellowstone Center for Resources.

--Wagner, Frederic H., et al., *Wildlife Policies in the U.S. National Parks*. Washington, DC: Island Press, 1995. Includes a discussion of the problems of defining "nature" and "natural" (pp. 22-28, pp. 141-152). One difficulty is that the authors accept the pre-1492 native American population at 100 million. Reviewed by Sam McNaughton in *Journal of Wildlife Management* 60 (no. 3, 1996):685-687), a thoughtful and entertaining review.

--Moore, Bud, *The Lochsa Story: Land Ethics in the Bitterroot Mountains*. Missoula, MT: Mountain Press Publishing Co., 1996. The Lochsa country is a region of the Bitterroot Mountains, Idaho. Moore is a forester with the U.S. Forest Service.

--Brandt, Anthony, "Not in my Backyard," *Audubon* 99(no. 5, Sept.-Oct. 1997):58-62, 86-87, 102-103. The suburbanization of wildlife. Wildlife is rapidly encroaching on America's suburbs, and vice versa. How are we to tolerate the hometown proliferation of predators and prey? This includes not only deer and birds, but bears and cougars. Animals can become inconvenient. The real test comes when wildlife affects you and your property. Brandt lives on Long Island and has watched the deer populations become larger and more troublesome.

--Lear, Linda, Rachel Carson: Witness for Nature. New York: Henry Holt, 1997. 640 pages. \$ 35. Carson died in 1964, aged 57, and one of the most famous people in America, but her personal life is little known. She was employed full-time at the U.S. Fish and Wildlife service, but had heavy family responsibilities--her mother, her sister, her nieces, and, ultimately, her grandnephew, whom she adopted--all the while trying to find a few hours for her work, driven by her sense of the importance of her subject--first the sea, and then life itself. She was ill throughout the writing of Silent Spring. Carson prospered in adverse circumstances; she also changed the circumstances of everyone who came after her. "For Carson, nature writing and popular science writing were vehicles of human redemption." Lear teaches at George Washington University.

--Nelson, Richard K., Heart and Blood: Living with Deer in America. New York: Alfred A. Knopf, 1997. 432 pages. \$ 27.50. Deer, deer hunting, and the dilemmas of booming deer populations. Nelson claims, from his Eskimo mentors, that what the true hunter sees is not entirely visible to the non-hunter.

--Backes, David, A Wilderness Within: The Life of Sigurd F. Olson. Minneapolis: University of Minnesota Press, 1997. 376 pages. \$ 24.95. Olson as the conservationist responsible for ensuring the protection of the Boundary Waters Canoe area from logging and fly-in fishing.

--McGowan, Christopher, The Raptor and the Lamb: Predators and Prey in the Living World. New York: Henry Holt, 1997. 235 pages. \$ 25. Predation is one of the fundamental forces driving the economy of life on Earth, and humans are fascinated by it. Studying predation offers a way to understand dynamic relations among species and to see the adaptations made in response to a dangerous world. McGowan is in zoology at the University of Toronto.

--Wilson, James D. and J. W. Anderson, "What the Science Says: How We Use It and Abuse It to Make Health and Environmental Policy," Resources (Resources for the Future, 1616 P. Street, NW, Washington, DC 20036-1400), Summer 1997, Issue 126, pp. 5-8. Science is used and abused by either side in environmental controversies, partly because policy makers and scientists are unwilling to face up to the uncertainties in scientific knowledge, which is often incomplete when decisions must be made. Scientific consensus on environmental issues has often changed back and forth several times. The best assurance of good public policy seems to lie not only in scientific knowledge per se but in open debate, caution, and a regulatory system capable of self correction. Good short article to get these issues under discussion in a classroom. Wilson is a

fellow with RFF, and Anderson, formerly with the Washington Post, is a journalist in residence at RFF.

--Gaard, Greta, *Ecological Politics: Ecofeminists and the Greens*. Philadelphia: Temple University Press, 1998. An account of these two interconnected social movements from their grassroots origins in the 1970's to the 1996 presidential campaign. There is often a transition from a leftist and sometimes anarchist focus to an emphasis on electoral political action. Ecofeminists have shaped the green movement, but many have withdrawn, and from this disaffection, she worries about the compatibility of liberal feminism and cultural ecofeminism and patriarchal politics. Within the greens, there are conflicts over philosophy, conflicts over representation, and conflicts over strategy. Gaard teaches humanities in Fairhaven College at Western Washington University, and has been a member of both movements.

--Griffin, Emilie, *Wilderness Time: A Guide for Spiritual Retreat*. San Francisco: HarperSanFrancisco, 1997. 109 pp. \$ 13.00 paper. Griffin emphasizes the gospel's picture of Jesus withdrawing from community into wilderness, in retreat for the sake of return to community. Distills some of the experiences of the Renovaré movement.

--Lemonick, Michael D., "Sharks under Attack," *Time*, August 11, 1977, pp. 59-64. We're killing them, 30-100 million a year, and lots of other fish, much faster than they can reproduce. Are they doomed to extinction? Much of the catch is wasted.

--Nash, Madeline J., "The Fish Crisis," *Time*, August 11, 1997, pp. 65-67. The oceans that once seemed a bottomless source of high-protein, low-fat food are rapidly being depleted.

--Russian Conservation News is the only English language publication presenting articles on environment and nature conservation in countries of the former Soviet Union. A joint publication of The Center for Russian Nature Conservation and The Biodiversity Conservation Center. Published quarterly, \$ 15 a year to individuals, \$ 25 to organizations. Russian Conservation News, c/o Pocono Environmental Education Center, R.R. 2, Box 1010, Dingmans Ferry, PA 18328, 717/828-2319. Fax 717/828-9695.

<http://www.igc.apc.org/bcc-west>

--Ramsay, Paul, *Revival of the Land--Creag Meagaidh National Nature Reserve*. Battleby, Perth PH1 3EW (Scotland): Scottish National Heritage, 1997. £ 7.50 paper. Ecological restoration on a 9700 acre reserve in the Inverness-shire, in the highlands of Scotland. In 1985 the then Nature Conservancy Council (now the Scottish National Heritage) purchased an estate, Creag Meagaidh, and undertook ecological restoration on a scale never before attempted, a project that has generated wide interest in land management, forestry, and conservation circles in the United Kingdom. Of particular interest because of the long human occupancy of the area and the long history of use and abuse, and the question what sort of restoration ought to be done and was possible.

Earth Ethics, vol. 8, nos. 2-3, Winter/Spring 1997, contains several articles on the proposed UN Earth Charter:

--"The Earth Charter, Benchmark Draft"

--Rockefeller, Steven C., "The Earth Charter Process"

--Clugston, Richard M., "A Common Ground for Global Earth Ethics?"

--Jaaffar, Mehdi Ahmed, "The Earth Charter--The Oman Report" (a report from the Sultanate of Oman)

--Burford, Grace, Sallie King, Paul Knittier, and Jay McDaniel, "A Buddhist-Christian Contribution to the Earth Charter" (two authors are Buddhists; two are Christians)

--Dwivedi, O. P., "India's Heritage of Environmental Stewardship"

and a forum with contributions by Vaclav Havel, Brendon Mackey, David McCloskey, also excerpts from the report of a working group of the Commission on Sustainable Development.

There is also a section on "Common Critiques of the Earth Charter," and response. The critiques are:

1. The Earth Charter is a norther, environmental document that does not take into account the realities of the global south.
2. The Earth Charter's romantic animism and "new age" thinking are not defensible scientifically, despite repeated historical attempts to assert an organicist or vitalist world view.
3. The Earth Charter is a step backward. The language is feeble because it fails to integrate and assert the best language already in place in existing documents, crafted in the nearly endless series of UN Summits, from Rio through Rome.

4. The Earth Charter is not poetic, spiritual or moving enough. Too much has been written by committee, resulting in a hodge-podge of poetry, philosophical musings, and UN bureaucratic language.

All the articles are short and concentrated. The draft Charter and these discussions can make stimulating class materials.

--Dwivedi, O. P., "Environmental Stewardship: Our Spiritual Heritage for Sustainable Development," *Journal of Developing Societies* 12 (no. 2, 1996). Dwivedi teaches at the University of Guelph, Canada.

--Coward, Harold, "New Theology on Population, Consumption, and Ecology," *Journal of the American Academy of Religion* 65(1997):259-273. Often religion is never mentioned in these debates, yet it is clear that religions can and do strongly shape people's attitudes to the environment, to practices surrounding fertility and reproductive health, and to the just sharing of Earth's resources. Introducing a theme issue on "Religious Responses to Problems of Population, Consumption, and Degradation of the Environment," resulting from a research project on the topic, the full results of which will be published by SUNY Press. Coward is in Studies in Religion and Society at the University of Victoria, British Columbia.

--Loy, David R., "The Religion of the Market," *Journal of the American Academy of Religion* 65(1997):275-290. The discipline of economics is less a science than the theology of the religion of the market. It's god, the Market, has become a vicious circle of ever-increasing production and consumption by pretending to offer a secular salvation. The Market is becoming the first truly world religion. Loy is in International Studies, Bunkyo University, Chigasaki, Japan.

--Narayanan Vasuda, "'One Tree is Equal to Ten Sons': Hindu Responses to the Problems of Ecology, Population, and Consumption," *Journal of the American Academy of Religion* 65(1997):291-332. Narayanan is in religion at the University of Florida, Gainesville.

--Gross, Rita M., "Toward a Buddhist Environmental Ethic," *Journal of the American Academy of Religion* 65(1997):333-353. The key is the concept of trishna, desire (Sanskrit), or tanha (Pali). "More is not better whether it is more people or more consumables. 'Growth,' the god we worship is a false idol, needing to be replaced by 'no growth,' if not by 'negative growth.' 'Growth' and 'more' represent the unbridled reign of trishna, not appreciation and reverence for the interdependent matrix of the environment in which we live and upon which we depend

unconditionally ... With enough meditation and contemplation of interdependence, trishna will give way to equanimity." Gross is in religion at the University of Wisconsin, Eau Claire.

--Keller, Catherine, "The Lost Fragrance: Protestantism and the Nature of What Matters," *Journal of the American Academy of Religion* 65(1997):355-370. Examines the key paradigms of Protestant theology, especially those of Calvin, Barth, and Kierkegaard for insight into the Protestant ambivalence about "nature" and all matters of materiality. A characteristic denaturalization inhibits Protestant thought; Keller wishes to re-embed the human within the planetary society of mostly nonhuman life as a sustainable, civil and humane economy within nature. Keller teaches theology at Drew University Theological School, Madison, NJ.

--Chidester, David, and Edward T.G. Linenthal, eds., *American Sacred Space*. Bloomington: Indiana University Press, 1995. Includes Taylor, Bron, "Resacralizing Earth: Pagan Environmentalism and the Restoration of Turtle Island," a review of Earth-based religiosity.

--Jacobsen, Knut A., "Bhagavadgita, Ecosophy T, and Deep Ecology," *Inquiry* 39(no. 2, June, 1996):219-38. "This article analyzes the influence of Hinduism on Ecosophy T. Arne Naess in several of his environmental writings quotes verse 6.29 of the Bhagavadgita, a Hindu sacred text. The verse is understood to illustrate the close relationship between the ideas of the oneness of all living beings, non-injury, and self-realization. The article compares the interpretations of the verse of some of the most important Hindu commentators on the Bhagavadgita with the environmentalist interpretation. There is no agreement in the history of the Hindu tradition on the meaning of the verse. The interpretation of Ecosophy T contrasts sharply with the interpretations of the Hindu monastic traditions but has similarities with the twentieth-century social activist interpretations of Mohandas K. Gandhi and S. Radhakrishnan. In Ecosophy T aspects of this social activist version of Hinduism have been creatively reinterpreted in the context of contemporary environmentalism." Of interest is the fact that interpretations of this verse "were originally related to the attempt of the Hindu ascetics to free the self, or atman, from bondage to the material world, an effort which to some degree is the very opposite of that of integrating humans into the natural world the preservation of the biotic communities attempted by contemporary environmental thinkers" (p. 219). Jacobsen teaches at the University of Bergen, Norway.

--Clark, John, "How Wide is Deep Ecology?" *Inquiry* 39(no. 2, June, 1996):189-201. "Arne Naess's 'rules of Gandhian nonviolence' might usefully be applied to recent debates in ecophilosophy. The 'radical ecologies' have increasingly been depicted as mutually exclusive alternatives lacking any common ground, and many of the hostile and antagonistic attitudes that Naess cautions against have become prevalent. Naess suggests, however, that fundamental

differences concerning theory and practice can coexist with a respect for one's opponents, an openness to the views of others, and a commitment to cooperation in the pursuit of mutually held goals. I raise questions about the scope of deep ecology in the light of Naess's non-ideological, 'deep-questioning' approach. First, I ask whether an expanded consideration of the social institutional implications of deep ecology would not increase its depth, relevance and appeal to proponents of other ecologies. Second, I pose the question of whether certain tendencies to define deep ecology in stark opposition to other ecophilosophies have not impeded the original aims of the movement. And, finally, I suggest that possible answers to these questions are implicit in Arne Naess's ecophilosophy." Clark is at Loyola University, New Orleans.

--Rothenberg, David, "No World but in Things: The Poetry of Naess's Concrete Contents," *Inquiry* 39(no. 2, June, 1996):225-272. "Arne Naess introduced the notion of 'concrete contents' to posit that the qualities we perceive in nature are intrinsic to the things themselves, and not just projections of our senses on to the world. This gives environmentalism more credence than if secondary qualities about the environment are considered subjective in a pejorative sense. But the concrete contents position pushes philosophy toward poetry because it suggests that felt qualities are as primary as logic. For a philosophy to justify itself, it sometimes needs to find resonance with qualities outside its borders. Examples are presented from Italian writer Italo Calvino, the music of the Kaluli people of New Guinea, a film by John Sayles, and a poem by Thomas Tranströmer. The concrete philosophical contents of the world are found in the relationships between philosophy and experience, never inside philosophy alone. Rothenberg is at the Center for Policy Studies, New Jersey Institute of Technology, Newark.

--Curtin, Deane, "A State of Mind Like Water: Ecosophy T and the Buddhist Traditions," *Inquiry* 39(no. 2, June, 1996):239-253. Arne Naess has come under many influences, most notably Gandhi and Spinoza. The Buddhist influence on his work, though less pervasive, provides the most direct account of key deep ecological concepts such as Self-realization and intrinsic value. I read Ecosophy T as a rigorously phenomenological branch of Deep Ecology. Like early Buddhism, Naess responds to the human suffering that causes environmental destruction by challenging us to return to the reality of lived experience. This Buddhist reading clarifies, but it also complicates. It reaffirms Naess's essential vision, but it challenges him at two points: first, to affirm that Self-realization is a process of co-realization with all beings, not just with sentient beings. Second, while this reading accepts that humans do not create the value of nature, it questions whether its value is best expressed in terms of the 'intrinsic value' of radical environmental ethicists." Curtin is at Gustavus Adolphus College, St. Peter, MN.

--Glasser, Harold, "Naess's Deep Ecology Approach and Environmental Policy," *Inquiry* 39(no. 2, June, 1996):157-187. "A clarification of Naess's 'depth metaphor' is offered. The relationship between Naess's empirical semantics and communication theory and his deep ecology approach to ecophilosophy (DEA) is developed. Naess's efforts to highlight significant conflicts by

eliminating misunderstandings and promoting deep problematizing are focused upon. These insights are used to develop the implications of the DEA for environmental policy. Naess's efforts to promote the integration of science, ethics, and politics are related to the National Environmental Policy Act (NEPA). The action-oriented aspect of deep ecology, its focus upon redirecting environmental policy, is also highlighted. The discussion is framed by Bryan Norton's contention, in *Toward Unity Among Environmentalists*, that Naess's deep/shallow distinction is not consequential. In the final section some of the uniqueness of Naess's contribution is intimated, the 'sturdiness' of deep ecology's foundation is considered, and directions for future theoretical and practical contributions are suggested. As will be observed, Naess has many important insights to offer, but some vexing issues persist. Glasser is at the New Jersey Institute of Technology, Newark.

--McGinnis, Michael Vincent, "Deep Ecology and the Foundations of Restoration," *Inquiry* 39(no. 2, June, 1996):203-217. "Throughout the globe, degraded ecosystems are in desperate need of restoration. Restoration is based on world-view and the human relationship with the natural world, our place, and the landscape. The question is, can society and its institutions shift from development and use of natural resources to ecological restoration of the natural world without a change in world-view? Some world-views lead to more destructive human behavior than others. Following Naess's ecosophical comparison of the deep and shallow ecology movements, this essay depicts the relationships between restorationists and the natural world. Contrast the anti-restoration position of Katz/Elliott. In deep ecological restoration we can develop a realization that our community is part of the self-producing character of all life. In deep ecological restoration, we find one important medium for the institutionalization, politicalization, and transpersonalization of a deeper understanding of what it means to be human being with nature." McGinnis is with the Center for Bioregional Conflict Resolution, Goleta, CA.

--Lemons, John, and Brown, Donald A., *Sustainable Development: Science, Ethics and Public Policy*. Dordrecht: Kluwer Academic Press, 1995. Contains: Brown, Donald A., "The Role of Law in Sustainable Development and Environmental Protection Decisionmaking," pp. 64-76.

--Rees, William E., and Wackernagel, Mathis, *Our Ecological Footprint*. Gabriola Island, B.C., Canada: New Society Publishers, 1996. The authors propose an ecological worldview in contrast with the prevailing expansionist worldview. "An ecological economic perspective would see the human economy as an inextricably integrated, completely contained, and wholly dependent subsystem of the ecosphere" (p. 4) "The ecological footprints of individual regions are much larger than the land areas they physically occupy" (p. 16)

--World Development Report 1997--The State in a Changing World. Philadelphia: The World Bank, 1997. \$ 25.95. 354 pages. (The World Bank, P. O. Box 7247-8610, Philadelphia, PA 19170-8619). Also available is the World Development Reports 1978-1997 on CD-ROM. Can an economy flourish without an effective state? No, and here's why. Many states try to do too much with too few resources and little capability. Governments should focus on core public activities that are vital to development. State-led development strategies have often failed. Re-invigorated public institutions need to give public officials the incentive to do their jobs better and to be more flexible, but also to provide restraints to check arbitrary and corrupt behavior.

--Stoneman, Colin, "Spiritual Biology," *Journal of Biological Education* 31 (no. 2, Summer 1997):131-134. What should biology teachers do where there is an interest in education for spiritual development? The UK government Office for Standards in Education has long held that education should contribute to pupil's moral, spiritual, and social development, but more recently, since 1992 as a consequence of the Education (Schools) Act of 1992, has urged that all subjects of the curriculum contribute to this development, including biological science. Biology does not deal with "spirit"; some think that the success of biology requires chasing out the spirits; and yet biologists do not want the reputation of being indifferent toward their pupils whole and well rounded development. The guidelines say: "Spiritual development refers to that aspect of inner life through which pupils acquire insights into their personal existence which are of enduring worth [including] valuing a non-material dimension to life and intimations of an enduring reality." There are better and worse ways of interpreting what this might mean for biology. Might it involve caring for creation and environmental responsibility for example? Or the deeper questions of human existence, such as the mind-body problem, the human relation to nature, or ethics and biology? In any case, (British) biologists have a challenge. Stoneman is a retired biology teacher.

--Wolkomir, Michelle, Futreal, Michael, Woodrum, Eric, and Hoban, Thomas, "Denominational Subcultures of Environmentalism," *Review of Religious Research* 38 (no. 4, June 1997):325-343. The authors test the hypothesis that Christian denominations that take the Genesis "dominion" teaching more seriously will have less environmental concern, and find this to be false. They do not find any significant impact of belief in the dominion of humans on environmental attitudes. Different religious groups have varied ways of interpreting such scriptures. This raises the further question of what other aspects of religious belief and activity do connect with environmentalism. Michelle Wolkomir is in sociology at North Carolina State University.

--Bartkowski, John P., and Swearingen, W. Scott, "God Meets Gaia in Austin, Texas: A Case Study in Environmentalism as Implicit Religion," *Review of Religious Research* 38(1997):308-324. Drawing on insights from Mircea Eliade's theory of sacred space, the authors call attention to a series of striking similarities between classical modes of religious experience on the one

hand and the sacralization of a prized natural resource located in Austin, Texas, on the other. Using interview data, they argue that Austin's Barton Springs is construed in terms that provide (1) nodal space to individuals giving access to ultimate reality, (2) integrative space which binds them to the local Austin community, and (3) democratic space that furnishes Austin with a distinctive character in opposition to surrounding locales. The authors are at the University of Texas, Austin.

--Guth, James L., Green, John C., Kellstedt, Lyman A., and Smidt, Corwin E., "Faith and the Environment: Religious Beliefs and Attitudes on Environmental Policy," *American Journal of Political Science* 39(1995):364-382.

--Kanagy, Conrad L., and Nelsen, Hart M., "Religion and Environmental Concern: Challenging the Dominant Assumptions," *Review of Religious Research* 37(1995):33-45. The authors, in a social science survey, tested three measures of religious activity (attendance at church, born-again Christian, personal religion) in relationship to three environmental attitudes (increase federal spending, relax environmental controls for economic growth, self-identification as an environmentalist), and found various connections, but, "overall, our interpretation of these findings challenges the dominant view that those in Judeo-Christian traditions--particularly religiously conservative individuals in these traditions--are less concerned about environmental issues than are others. The authors are at The Pennsylvania State University.

--AtKisson, Alan, "Thou Shalt Care for the Earth: Evangelical Christians and Catholics are Beginning to See the Green Light," *Utne Reader* 68(1995):15-16.

--Tanner, William F., "'Planet Earth' or 'Land?'" *Perspectives on Science and Christian Faith* 49 (no. 2, June 1997):111-115. Ancient Greek and Hebrew words which are commonly translated as "earth" ("Earth") or "world" in the English Bible do not refer to the planet on which we live, but rather to "land," "country," "ground," "soil" or "dirt." The meaning of "all the Earth" is vastly different from "all the land." The concept of our home as a planet was not known until many centuries later. The discovery by geographers that the Earth is essentially a sphere is not closely related to the equally important discovery that it is one of the planets. Modern English dictionaries do not invariably make the necessary distinctions, in some instances even citing "earth" (without an initial capital E) as the name (identification) of our planet, although other planets, such as Venus, are identified with a capital initial letter. The result is linguistic confusion and ambiguity. Tanner is at Florida State University.

--Zuidema, Pieter A., Sayer, Jeffrey A., Dijkman, Wim. "Forest Fragmentation and Biodiversity: The Case for Intermediate-sized Conservation Areas," *Environmental Conservation* 23(no.4 1996):290.

--Brunnee, Jutta, Nolkaemper, Andre. "Between the Forests and the Trees--An Emerging International Forest Law," *Environmental Conservation* 23(no.4 1996):307.

--Wells, Michael P. "The Social Role of Protected Areas in South Africa," *Environmental Conservation* 23(no.4 1996):322.

--Rowell, Andrew. "Beating the Green Backlash," *The Ecologist* (1979) 27(no.3 1997):86.

--Karlner, Joshua, Morales, Alba, O'Rourke, Dara. "The Barons of Bromide: The Corporate Forces Behind Toxic Poisoning and Ozone Depletion," *The Ecologist* (1979) 27(no.3 1997):90. The pesticide, methyl bromide, poisons farm workers and communities and destroys the ozone layer. A broad coalition is working for the chemical's rapid and total phase-out worldwide and its replacement by sustainable agricultural practices. Methyl bromide's manufacturers, however, are lobbying hard at local, national and international levels to keep the chemical on the market.

--Cone, Richard A., Martin, Emily. "Corporeal Flows: The Immune System, Global Economies of Food & Implications for Health," *The Ecologist* (1979) 27(no.3 1997):107. Allergies and autoimmune disorders are increasing in incidence worldwide, especially among the urban poor. Changes in food production, transport and consumption may be contributing to this increase. Research into the connections between diet and the immune system has therefore become urgent; it may suggest ways to reduce the incidence or severity of such disorders by changing what we eat and the global food system.

--Agarwal, Anil, Narain, Sunita. "Dying Wisdom: The Decline and Revival of Traditional Water Harvesting System in India," *The Ecologist* (1979) 27(no.3 1997):112. Over the centuries, villagers in India have developed a wide range of techniques to collect rainwater, groundwater, stream water, river water, and flood water. Since the colonial era, however, such water harvesting systems have been declining. Reviving them offers a realistic alternative to the large dams and water development projects promoted by the state authorities as a "solution:" to India's water crisis.

--Rowell, Andrew. "Crude Operators: The Future of the Oil Industry," *The Ecologist* (1979) 27(no.3 1997):99. Technological advances and the maturity of existing oil fields have spurred oil companies to explore for oil and extract it from previously inaccessible or "frontier" areas, both offshore and onshore, so as not to be totally reliant upon Middle Eastern resources. In many cases, such prospecting and production is having severe environmental impacts and serious social, ethical and cultural consequences.

--Ohmagari, Kayo, Berkes, Fikret. "Transmission of Indigenous Knowledge and Bush Skills Among the Western James Bay Cree Women of Subarctic Canada," *Human Ecology* 25(no.2 1997):197.

--Wadley, Reed L., Colfer, Carol J. Pierce, Hood, Ian G. "Hunting Primates and Managing Forests: The Case of Iban Forest Farmers in Indonesian Borneo," *Human Ecology* 25(no.2 1997):243.

--Wiley, Andrea S. "A Role for Biology in the Cultural Ecology of Ladakh," *Human Ecology* 25(no.2 1997):273.

--Williams, Dee Mack. "Patchwork, Pastoralists, and Perception: Dune Sand as a Valued Resource Among Herders of Inner Mongolia," *Human Ecology* 25(no.2 1997):297.

--Henrich, Joseph. "Market Incorporation, Agricultural Change, and Sustainability Among the Machiguenga Indians of the Peruvian Amazon," *Human Ecology* 25(no.2 1997):319.

--Figueiredo, Gisela M., Leitao-Filho, Hermogenes F., Begossi, Alpina. "Ethnobotany of Atlantic Forest Coastal Communities: II. Diversity of Plant Uses at Sepetiba Bay (SE Brazil)," *Human Ecology* 25(no.2 1997):353.

--Davison, Aidan, Barns, Ian, Schibeci, Renato. "Problematic Publics: A Critical Review of Surveys of Public Attitudes to Biotechnology," *Science, Technology, & Human Values* 22(no.3 1997):317.

--Alm, Leslie R. "Scientists and the Acid Rain Policy in Canada and the United States," *Science, Technology, & Human Values* 22(no.3 1997):349.

--DiSilvestro (Di Silvestro), Roger. "Steelhead Trout: Factors in Protection," *Bioscience* 47(no.7 1997):409. The federal government may list this salmon species this summer, amid a cauldron of conflicting concerns.

--Coley, Rebekah Levine, Kuo, Frances E., Sullivan, William C. "Where Does Community Grow? The Social Context Created by Nature in Urban Public Housing," *Environment and Behavior* 29(no.4 1997):468.

--Newell, Patricia Brierley. "A Cross-Cultural Examination of Favorite Places," *Environment and Behavior* 29(no.4 1997):495.

--Bixler, Robert D., Floyd, Myron F. "Nature is Scary, Disgusting, and Uncomfortable," *Environment and Behavior* 29(no.4 1997):443.

--Berger, Ida E. "The Demographics of Recycling and the Structure of Environmental Behavior," *Environment and Behavior* 29(no.4 1997):515.

--Kitchin, Robert M., Blades, Mark, Golledge, Reginald G. "Relations Between Psychology and Geography," *Environment and Behavior* 29(no.4 1997):554.

--Moretti, Laura A. "Mission Possible: Ending Four Abusive Animal Attractions," *The Animals' Agenda* 17(no.3,1997):22. How to use existing momentum to rescue a chimpanzee, an orca, and several bears from abysmal lives at tourist attractions.

--Barnato, Teri. "Should Dogs and Cats Be Vegetarian?," *The Animals' Agenda* 17(no.3,1997):28. Teri Barnato examines the nutritional and ethical factors of meatless diets for companion animals.

--Brink, Ellen. "Pork, Politics, and Pollution," *The Animals' Agenda* 17(no.3,1997):31. A detailed look at the increasingly rancid business of hog factory farming.

--Rifkin, Jeremy. "Dolly's Legacy: The Implications of Animal Cloning," *The Animals' Agenda* 17(no.3,1997):31. Rifkin claims animal cloning is "the most fundamental violation of animal rights in history."

--Palmer, Karen, Sigman, Hilary, Walls, Margaret. "The Cost of Reducing Municipal Solid Waste," *Journal of Environmental Economics and Management* 33(no.2, 1997):128.

--Kazimi, Camilla. "Evaluating the Environmental Impact of Alternative-Fuel Vehicles," *Journal of Environmental Economics and Management* 33(no.2, 1997):163.

--Barrett, James, Segerson, Kathleen. "Prevention and Treatment in Environmental Policy Design," *Journal of Environmental Economics and Management* 33(no.2, 1997):196.

--Watson, Jeff, ed. *The Golden Eagle*. San Diego: Academic Press, 1997. 392 pp. \$49.95 paper. Watson has worked on eagles in Scotland for over 15 years and his studies provide the foundation for a treatment which also includes up to date information from work in North America, continental Europe, and throughout the world. The species' relationships in a variety of habitats.

--Danz, Harold P. *Of Bison and Man*. Niwot, CO: University Press of Colorado, 1997. 232 pp. \$32.50. The bison's prehistory and natural history, its complex relationship with Native Americans, the bison slaughter and recovery, the establishment of the bison as an industry, and the role bison play today, both as food source and as a wild animal.

--Voorhees, John, Camarota, Anton G., Woellner, Robert A. *Corporate Environmental Risk Management: ISO 14000 and the Systems Approach*. Boca Raton, FL: Lewis Publishers, 1997. 320 pp. \$59.95. This gives readers an extensive analysis of practical applications of ISO 14000 and environmental compliance management systems. It offers a mixture of technical engineering advice, legal guidance, and commonsense business.

--Shepherdson, David J., Mellen, Jill D. Hutchins, Michael, eds. *Second Nature: Environmental Enrichment for Captive Animals*. Washington, D.C.: Smithsonian Institution Press, 1997. 336 pp. \$32.50. Moving beyond the usual studies of primates, contributors argue that whether an animal forages in the wild or plays computer games in captivity, the satisfaction its activity provides--rather than the activity itself--determines its level of physical and psychological well-being.

--Goodman, Steven M., Patterson, Bruce D., eds. *Natural Change and Human Impact in Madagascar*. Washington, D.C.: Smithsonian Institution Press, 1997. 434 pp. \$75 cloth, \$35 paper. Describing the past dynamism of island environments and analyzing the causes of the disappearance of many of the island's endemic species, the contributors also assess future prospects for preserving Madagascar's remaining natural areas while sustaining a healthy human economy.

--McNutt, John, Boggs, Lesley P. *Running Wild: Dispelling the Myths of the African Wild Dog*. Washington, D.C.: Smithsonian Institution Press, 1997. 150 pp. \$45. Uncovering extraordinary new facts about the life and habits of the African wild dog, the authors argue for its importance as an "indicator species" in one of the world's most ecologically significant wetlands. They document the hunting behavior, play rituals, and natural history of the Mombo pack in the heart of Botswana's Okavango Delta.

--Stuart, Tilde, Stuart, Chris. *Africa's Vanishing Wildlife*. Washington, D.C.: Smithsonian Institution Press, 1996. 208 pp. \$39.95. Pinpointing both keystone species and those that are little known, the authors provide information on each animal's behavior, evolution, habitat, diet, social structure, and conservation status.

--Bjorndal, Karen A. ed. *Biology and Conservation of Sea Turtles: Revised Edition*. Washington, D.C.: Smithsonian Institution Press, 1995. 584 pp. \$29.95. This updated edition reflects

significant advances in sea turtle research. A new section summarizes developments and primary literature for fourteen areas of sea turtle biology and conservation.

--Garland, Mark S. *Watching Nature: A Mid-Atlantic Natural History*. Washington, D.C.: Smithsonian Institution Press, 1997. 256 pp. \$15.95. Naturalist Mark Garland and illustrator John Anderton take readers on field trips among the highlands of West Virginia, the forested ridges and valleys of western Maryland and central Pennsylvania, the gently rolling Piedmont region around Washington, D.C., and the flat coastal plain extending from southern New Jersey to Virginia Beach.

--Pickett, Steward, Ostfeld, Richard S., Shachak, Moshe, Likens, Gene E., eds. *The Ecological Basis of Conservation: Heterogeneity, Ecosystems, and Biodiversity*. New York: Chapman and Hall, 1997. 432 pp. \$59.95. Conservation policy is moving toward conservation and management of the interactive networks and large-scale ecosystems on which species depend. This book offers a scientific framework for this new approach, providing a solid basis for stronger links between ecology and public policy.

--Fiedler, Peggy L., Kareiva, Peter M., eds. *Conservation Biology for the Coming Decade*. Washington, D.C.: Smithsonian Institution Press, 1997. 528 pp. \$44.95. This revised edition incorporates a number of new authors and additional chapters. Ten new chapters highlighting such topics as ecosystem management and the economics of conservation.

--Claridge, M.F., Dawah, A.H., Wilson, M.R. eds. *Species: The Units of Biodiversity*. Washington, D.C.: Smithsonian Institution Press, 1997. 456 pp. \$89.95. An international team of experts provides a detailed account of their ideas on the species concept for selected groups of organisms, from viruses to mammals.

--Schwartz, Mark W., ed. *Conservation In Highly Fragmented Landscapes*. Washington, D.C.: Smithsonian Institution Press, 1997. 448 pp. \$49.95. The difficulties in making practical decisions regarding conservation when the habitat has been highly fragmented. Illinois as a case study since that state was settled heavily and early and had lost most of its natural habitat before the conservation movement began.

--Taylor, Victoria J., Dunstone, Nigel, eds. *The Exploitation of Mammal Populations*. Washington, D.C.: Smithsonian Institution Press, 1997. 440 pp. \$72.95. In 22 chapters the issues involved in harvesting, hunting, sustainable trade and ecotourism are explored and set in the context of past and present mammal exploitation. These are taken from a joint conference of the Universities' Federation for Animal Welfare and the Mammal Society.

--Kunin, William, Gaston, Kevin, eds. *The Biology of Rarity: Causes and Consequences of Rare-common Differences*. Washington, D.C.: Smithsonian Institution Press, 1997. 296 pp. \$99.95. Documented patterns of differences in rare species in terms of their body size, dispersal, reproduction, etc. and the methodological difficulties plaguing their interpretation. The causes and consequences of rare-common differences and an analysis of the processes responsible for the creation and maintenance of interspecific differences more generally.

--Manahan, Stanley E. *Environmental Science and Technology*. Boca Raton, FL: St. Lucie Press, 1997. 672pp. \$49.95. The traditional environmental spheres of water, air, earth, and life, and the "anthrosphere" and the impact of human activities, especially technology, on the Earth.

--Costanza, Robert, Daly, Herman, Cumberland, John, Goodland, Robert, Norgaard, Richard. *An Introduction to Ecological Economics*. Boca Raton, FL: St. Lucie Press, 1997. 288 pp. \$39.95. Beginning with a description of some current problems in society and their underlying causes, then moving on to an historical perspective to explain how world views regarding economics and ecology have evolved, the writers continue by presenting the fundamental principles of ecological economics and outlining a set of policies for creating and implementing a sustainable society. They end with prospects for the future.

--Dol, Marcel, Kasanmoentalib, Soemini, Lijmbach, Susanne, Rivas, Esteban, Bos, Ruud van den, eds. *Animal Consciousness and Animal Ethics: Perspectives from the Netherlands*. Assen, The Netherlands, Van Gorcum Publishers, 1997. 264 pp. \$34. Philosophy and animal consciousness, science and animal consciousness, and ethics and animal consciousness.

--Nordhaus, William D. *The Swedish Nuclear Dilemma: Energy and the Environment*. Washington, D. C.: Resources for the Future, 1997. 184 pp. \$39. An analysis of an issue that has played a significant role in Swedish economic and energy policy for over fifteen years.

--Morgenstern, Richard D., ed. *Economic Analyses at EPA: Assessing Regulatory Impact*. Washington, D. C.: Resources for the Future, 1997. 500 pp. \$49.95. What works and what does not and why in using economic analysis to improve environmental decision making.

--Shinn, Terry, Spaapen, Jack, Krishna, Venni, eds. *Science and Technology in a Developing World*. Hingham, MA: Kluwer Academic Publishers, 1997. 420 pp. \$190. By grasping the epistemologies held or fostered in the south toward science and technology, the actions of southern peoples and their dealings with the north acquire more intelligibility.

--LeBreton (Le Breton), Binka. *A Land to Die For*. Atlanta: Clarity Press, 1997. 151pp. \$12.95. Recouping the events surrounding the assassination of Padre Josimo, a black priest internationally recognized for his role in the struggle of impoverished squatters for land, LeBreton captures the grass roots view of the turbulent social fabric of rural Brazil--large landowners, wealthy speculators, politicians, pistoleiros, peasants, and on both sides, the Catholic Church, torn between ancient ritual and contemporary liberation theology, heeding the cries of the poor and calling for justice. Le Breton is a British journalist who lives with her husband in an isolated area of southeastern Brazil.

--Lincoln, R.J., Boxshall, G.A., Clark, P.F. *A Dictionary of Ecology, Evolution and Systematics* (second edition). New York: Cambridge University Press, 1997. 350pp. \$51.96. Over 11,000 entries, providing a working dictionary for students, teachers, researchers and anyone having an interest within the broad arena of biodiversity studies.

--Shugart, Herman H. *Terrestrial Ecosystems in Changing Environments*. New York: Cambridge University Press, 1997. 524pp. \$68. The fundamental ecological concepts, theoretical developments, and quantitative analyses involved in understanding the responses of natural systems to change.

--Agren, Goran I., Bosatta, Ernesto. *Theoretical Ecosystem Ecology: Understanding Nutrient Cycles*. New York: Cambridge University Press, 1997. 250pp. \$49.95. A mathematical framework to illustrate how nutrient cycles operate and interact in plants and soils, forming the foundations of a new ecosystem theory.

--Clemmons, Janine R., Buchholz, Richard, eds. Behavioral Approaches to Conservation in the Wild. New York: Cambridge University Press, 1997. 398pp. \$64. Theoretical and practical arguments for considering animal behavior patterns in attempts to conserve biodiversity. The limits and potentials of behavioral research to conservation, the importance of variation in animal behaviors as a component of biodiversity, and the use of animal behavior to solve conservation problems.

--Heywood, V.H. (Vernon Hilton), ed. Global Biodiversity Assessment. New York: Cambridge University Press, 1997. 1,152 pp. \$100. Published for the United Nations Environment Programme. Over 1,000 leading scientists from around the world have contributed to this major assessment, providing a source of information for decision-makers, officials, scientists and others interested in the future of the planet. Sample articles: V. H. Heywood and I. Baste, "Characterization of Biodiversity"; F. A. Bisby, "Magnitude and Distribution of Biodiversity"; D. L. Hawksworth and M. T. Kalin-Arroyo, "Generation, Maintenance, and Loss of Biodiversity"; and much more. Sample information: The IUCN predicts the loss of 20,000 flowering plant species within the next few decades. Worldwide, nearly 200 species of wild vertebrates may be on the verge of extinction. There is a summary, 54pp. at \$12, which presents the main conclusion drawn by the "Assessment" with an emphasis on those aspects that will be of interest to policymakers.

--Self, Will, Great Apes. New York: Grove Press, 1997. 404 pages. \$ 24. A tale of a parallel universe where chimpanzees rather than humans evolve into the species with advanced culture. One of the chimpanzee psychologists undertakes to study a chimp with the delusion that humans were the species who evolved culture instead of the chimps. Reviewed in New York Times Book Review, Sept. 21, 1997.

--Smil, Vaclav, "China Shoulders the Cost of Environmental Change" Environment 39 (no. 6, 1997):6-9, 33-37. As demographic growth and industrial expansion continue to transform the world's most populous nation, the price China will pay for degrading its air, water, and land grows. Although complete data are difficult to obtain, there can be no doubt that recent environmental changes in China already carry economic costs roughly an order of magnitude higher than the country's annual spending on environmental protection. Even if the government tripled or quadrupled its outlays, they could easily meet the strictest benefit-cost criteria. Smil teaches geography at the University of Manitoba, Winnipeg. See also a similar item in "Issues."

--Kitcher, Philip, The Lives to Come: The Genetic Revolution and Human Possibilities. New York: Simon and Schuster, 1996. 381 pages. \$ 25. During the academic year 1993-94, Kitcher served as Senior Fellow with the U.S. Library of Congress assigned to report on ethical and

social issues associated with the Human Genome Project. His assessment of the potential outcomes of genetic technology on the human future grows out of that experience. Three percent of the funds for the Project have been earmarked for the study of the ethical, legal, and social implications of the project. Reviewed by Lisa Gannett in *Biology and Philosophy* 12(1997):403-419.

--Doogue, Edmund, "Poverty's Toll" (Report on the UN World Summit for Social Development, March 1996 in Copenhagen), *One World* (Geneva, Switzerland, World Council of Churches) No. 205, May 1996, pages 4-6. From UN figures, twenty percent of the world's population, the world's richest people, own almost 83 percent of the world's wealth and another twenty percent, the world's poorest people, own only 1.4 percent of the world's wealth. Over the past 30 years, the distribution of wealth has become more unequal. The Summit produced many resolutions and demands for reform, but "the check came back from the bank of justice marked 'insufficient funds.'"

--Wild Duck Review, vol. 3, no. 3, August 1997, is a special issue in tribute to Paul Shepard. Tributes by his wife, Florence Shepard, by Stephen Kellert, Bernie Krause, C. L. Rawlins, Barbara Ras, William Severine Kowinski, Barbara Dean, and Dolores LaChapelle. *Wild Duck Review*, 419 Spring Street, Suite D, Nevada City, CA 95959. 916/478-0134. (Thanks to George Sessions.)

--Noss, Reed, and Peters, Robert L., *Endangered Ecosystems: A Status Report on America's Vanishing Habitat and Wildlife*. Washington, DC: Defenders of Wildlife, 1995.

--McNeeley, Jeffrey A. and Keeton, William S., "The Interaction between Biological and Cultural Diversity," in von Droste, Bernd, Plachter, Harald, and Rössler, Mechtild, eds., *Cultural Landscapes of Universal Value: Components of a Global Strategy*. Jena, Germany: Gustav Fischer, 1995, in cooperation with UNESCO.

--Smolin, Lee, *The Life of the Cosmos*. New York: Oxford University Press, 1997. Claims that the universe, cosmology, is to be understood more as a living system than a mechanism. The world is a network of self-organizing relations. Natural selection needs to be extended beyond biology to the universe as a whole. (Such natural selection is the selection of the stablest systems. Smolin does not seem to realize that "the stablest survive" is even more subject to the charge of being a tautology than "the fittest survive." Also, concepts analogous to genetic information

transfer and cumulation, over which natural selection can operate, are difficult to extrapolate to astronomical systems.)

--Church, Jill Howard. "The Business of Animal Research," *The Animals' Agenda* 17(no.4, 1997):30. Church spotlights the industries that profit from vivisection but hide from public scrutiny.

--Smith, Joseph M. "The Lost World," *The Animals' Agenda* 17(no.4, 1997):29. Smith points out how some of the film's deeper messages relate to animal rights.

--Garner, Robert. "Labor Party Victory May Help Animals in Britain," *The Animals' Agenda* 17(no.4, 1997):33. Garner reports on how the "changing of the guard" during Britain's recent elections will impact animals.

--Schwartz, Sheila. "The Humane Hypothesis: Fostering Nonviolence at Science Fairs," *The Animals' Agenda* 17(no.4, 1997):35. How the pursuit of science and compassionate values can come together.

--Moretti, Laura A. "Reflections on the Normal Majority," *The Animals' Agenda* 17(no.4, 1997):19. Moretti tells of being exasperated by members of the movement's confrontational, intolerant "lunatic fringe"--and why she loves them.

--Carter-Long, Lawrence. "Learning from Debate," *The Animals' Agenda* 17(no.4, 1997):28. Animals deserve nothing less than thoughtful, spirited, and messy debates on their behalf.

--Fox, Michael W. "Toward Kinship," *The Animals' Agenda* 17(no.4, 1997):44. In "Why We Care About Animals," Michael W. Fox, V.M.D., explores the evolution of compassion.

--Machlis, Gary E., Force, Jo Ellen, Burch Jr., William R. "The Human Ecosystem. Part I: The Human Ecosystem as an Organizing Concept in Ecosystem Management," *Society & Natural Resources* 10(no.4, 1997):347.

--Force, Jo Ellen. "The Human Ecosystem, Part II: Social Indicators in Ecosystem Management," *Society & Natural Resources* 10(no.4, 1997):369.

--Fortmann, Louise. "Voices from Communities Managing Wildlife in Southern Africa," *Society & Natural Resources* 10(no.4, 1997):403.

--Jenkins, Amelia Fine. "Forest Health: A Crisis of Human Proportions," *Journal of Forestry* 95(no.9, 1997):11.

--Kukuev, Yuri A., Krankina, Olga N., Harmon, Mark E. "The Forest Inventory System in Russia: A Wealth of Data for Western Researchers," *Journal of Forestry* 95(no.9, 1997):15.

--Eddins, Katherine M., Flick, Warren A. "The Criminal Aspects of Environmental Law: An Evolving Forest Policy," *Journal of Forestry* 95(no.7, 1997):4.

--Hairston-Strang, Anne B., Adams, Paul W. "Oregon's Streamside Rules: Achieving Public Goals on Private Land," *Journal of Forestry* 95(no.7, 1997):14.

--Prestemon, Jeffrey P. "The Effects of NAFTA Expansion on US Forest Products Exports," *Journal of Forestry* 95(no.7, 1997):26.

--Crosson, Pierre. "Will Erosion Threaten Agricultural Productivity?" *Environment* 39(no.8, 1997):4. Despite widespread apprehensions to the contrary, erosion does not pose a serious threat to the global agricultural system's capacity to increase future yields.

--Staten, Mike, Hodges, John. "An Industrial Approach to Managing for Wildlife and Timber," *Journal of Forestry* 95(no.8, 1997):35.

--Dix, Mary Ellen, Akkuzu, Erol, Foster, John E. "Riparian Refugia in Agroforestry Systems," *Journal of Forestry* 95(no.8, 1997):38.

--Vitug, Marites Danguilan. "The Politics of Community Forestry in the Philippines," *The Journal of Environment and Development* 6(no.3, 1997):334.

--Phuong, Tran Thi Thanh. "AFTA and Its Environmental Implications for Vietnam," *The Journal of Environment and Development* 6(no.3, 1997):341.

--Jesdapipat, Sitanon. "Trade, Investment, and the Environment: Thailand," *The Journal of Environment and Development* 6(no.3, 1997):350.65

--Bawa, Kamaljit S., Menon, Shaily, Gorman, Leah R. "Cloning and Conservation of Biological Diversity: Paradox, Panacea, or Pandora's Box," *Conservation Biology* 11(no.4, 1997):829.

--Maddock, Ant, Benn, Grant A., Scott-Shaw, C. Rob. "An African Conservation Agency's Perspective on Advocacy," *Conservation Biology* 11(no.4, 1997):831.

--Hsu, Minna J., Agoramoorthy, Govin. "Wildlife Conservation in Taiwan," *Conservation Biology* 11(no.4, 1997):834.

--Alvard, Michael S., Robinson, John G., Kaplan, Hilliard. "The Sustainability of Subsistence Hunting in the Neotropics," *Conservation Biology* 11(no.4, 1997):977.

- Findlay, C. Scott, Houlahan, Jeff. "Anthropogenic Correlates of Species Richness in Southeastern Ontario Wetlands," *Conservation Biology* 11(no.4, 1997):1000.
- Delcourt, Hazel R., Delcourt, Paul A. "Pre-Columbian Native American Use of Fire on Southern Appalachian Landscapes," *Conservation Biology* 11(no.4, 1997):1010.
- Strittholt, James R. "Valuing Ecosystem Functions," *Conservation Biology* 11(no.4, 1997):1039.
- Fearnside, Philip M. "Conservation Priorities in Latin America," *Conservation Biology* 11(no.4, 1997):1040.
- Schoen, Deborah. "Primary Productivity: The Link to Global Health," *Bioscience* 47(no.8, 1997):477. A look at how terrestrial ecosystems will respond to changing climate.
- Armstrong, Bob. "Our Federal Public Lands," *Natural Resources & Environment* 12(no.1,1997):3
- Vail, Jeffrey. "Our National Parks and Forests: What Can Their Foundations Do To Help Them," *Natural Resources & Environment* 12(no.1,1997):8.
- Targ, Nicholas. "Water Law on the Public Lands: Facing a Fork in the River," *Natural Resources & Environment* 12(no.1,1997):14.
- Grimm, Lydia T. "Sacred Lands and the Establishment Clause: Indian Religious Practices on Federal Lands," *Natural Resources & Environment* 12(no.1,1997):19.
- Dalton, Michael G. "The Welfare Bias from Omitting Climatic Variability in Economic Studies of Global Warming," *Journal of Environmental Economics and Management* 33(no.3, 1997):221.

--Flores, Nicholas E., Carson, Richard T. "The Relationship between the Income Elasticities of Demand and Willingness to Pay," *Journal of Environmental Economics and Management* 33(no.3, 1997):287.

--Cameron, Trudy Ann, Englin, Jeffrey. "Respondent Experience and Contingent Valuation of Environmental Goods," *Journal of Environmental Economics and Management* 33(no.3, 1997):296.

--LaBelle, Judith M. "The Idea of the Countryside," *Environments* 24(no.3, 1997):1.

--Fuller, Tony. "Changing Agricultural, Economic and Social Patterns in the Ontario Countryside," *Environments* 24(no.3, 1997):5.

--Hilts, Stewart. "Landscapes and Stewardship in Ontario," *Environments* 24(no.3, 1997):11.

--Cox, Kenneth. "The Countryside in Ontario: Some Perspectives on Wetlands and Wildlife," *Environments* 24(no.3, 1997):17.

--Nelson, J.Gordon, Skibicki, Andrew, Lawrence, Patrick. "Land Use Change in the Southern Ontario Countryside: Significance, Response and Implications," *Environments* 24(no.3, 1997):22.

--Beechey, Tom, McLeod, Angus. "Parks and Other Heritage Areas in Ontario's Countryside," *Environments* 24(no.3, 1997):37.

--Robbins, Michael. "Southern Ontario Tourism Context and the Challenge for a Sustainable Future," *Environments* 24(no.3, 1997):50.

--Gibson, Lynn. "The Changing Political Landscape and Ontario Countryside," *Environments* 24(no.3, 1997):62.

--Watson, A. Elizabeth, LaBelle, Judith M. "Introduction to Planning and Land Use Management in the United States, with Some Comparisons with Canada and England," *Environments* 24(no.3, 1997):66.

--Davidson, Gary. "Ideas: Changing Policy in Ontario," *Environments* 24(no.3, 1997):79.

--Munton, Richard. "Engaging Sustainable Development: Some Observations on Progress in the UK," *Progress in Human Geography* 21(no.2, 1997):147.

--Glassman, Jim, Samatar, Abdi Ismail. "Development Geography and the Third-World State," *Progress in Human Geography* 21(no.2, 1997):164.

--Kearns, Robin A. "Narrative and Metaphor in Health Geographies," *Progress in Human Geography* 21(no.2, 1997):269.

--Russell, Emily W.B. *People and the Land Through Time*. New Haven: Yale University Press, 1997. 388 pp. \$35. A commentary on the human imprint on ecological patterns. Practical information on kinds, sources, and interpretations of historical documents and paleo-ecological records that ecologists need to know in order to understand ecological processes. An effort to understand the lingering consequences of human history on current ecosystems and landscapes, and conversely to understand the role that changing environments have played in human history.

--Hannum, Hildegard, ed. *People, Land, and Community*. New Haven: Yale University Press, 1997. 352 pp. \$35 cloth, \$17 paper. Contributors explore topics that range from agricultural reform to bioregional economics. They all, however, focus on the importance of sustainability, community, healthy and locally based economies of scale, education, the dignity of good work,

and balance between human needs and the wellbeing of the natural world. Based on a lecture series sponsored by the E.F. Schumacher Society.

--Bean, Michael J., Rowland, Melanie. *The Evolution of National Wildlife Law*, 3rd ed. Westport, Ct.: Praeger Publishers, 1997. \$75 cloth, \$28 paper. Since the second edition of 1983, intense interest in wildlife law has been matched only by a greatly increased level of litigation within the field and by the amount of new legislation enacted. This third edition thoroughly re-examines the field and provides a comprehensive review.

--Jasanoff, Sheila. "The Dilemma of Environmental Democracy. " *Issues in Science and Technology*, Fall, 1996, pages 63-70.

--Soroos, Marvin S. *The Endangered Atmosphere: Preserving a Global Commons*. Columbia, SC: University of South Carolina Press, 1997.

--Williams, Cindy Deacon. "Sustainable Fisheries: Economics, Ecology and Ethics," *Fisheries*. 22(no.2, 1997):6-11.

--Frost, Mervyn. *Ethics in International Relations: A Constitutive Theory*. New York: Cambridge University Press, 1996. 264 pp. \$18.95. Frost argues that ethics is accorded a marginal position within the academic study of international relations. He examines reasons given for this and evaluates those ethical theories that do exist within the discipline. He elaborates his own ethical theory which he derives from Hegel and applies it to ethical problems in international politics today.

--*Ethics and the Environment* 2, no 2 (Fall 1997). "Environmental Values and Environmental Law in New Zealand" by Alastair S. Gunn and Carolyn McCallig. "Affluence, Poverty, and Ecology: Obligation, International Relations, and Sustainable Development" by Paul G. Harris. "Gleaning Lessons from Deep Ecology" by David Keller. "Prospecting for Ecological Gold amongst the Platonic Forms: A Response to Timothy Mahoney" by Val Plumwood. "Marxism and Animal Rights" by David Szybel. "A Vegetarian Critique of Deep and Social Ecology" by David Waller. Norman S. Care, review of *Environmental Pragmatism*, ed. Andrew Light and Eric Katz. Raymond A. Younis, review of *Reinventing Nature*, ed. Michael E. Soulé and Gary Lease.

--Lemmons, John; Westra, Laura; and Goodland, Robert, eds. *Environment and Sustainability*. Dordrecht, The Netherlands: Kluwer Academic Publishers, 1997. Mostly new articles, including ones by Lynton Caldwell, James Sterba, and Baird Callicott. Includes several case studies.

--Westra, Laura. *Living with Integrity: A Global Ethic to Restore a Fragmented Earth*. Lanham, MD: Rowan Littlefield, 1997. This innovative book takes a new look at environmental ethics and the need for ecological and biological integrity. Westra explores the necessity for radical alteration not only of interpersonal ethics but also of social institutions and public policy. In the process, Westra denies the validity of majority rule in environmental ethical concerns. Issues discussed in the book include the link between ecological integrity and human health; an environmental evaluation of business and technology; biotechnology and transgenics in agriculture and aquaculture; and the environmental ethics of the ancient Greeks and Kant.

--Ott, Konrad. *Ipsa Facto, Zur ethischen Rekonstruktion normativer Implika wissenschaftlicher Praxis*. Frankfurt: Suhrkamp-Verlag, 1997. 820 pp.

--Nida-Rummelin, Julian, ed. *Angewandte Ethik: Die Bereichsethiken und ihre theoretische Fundierung*. Stuttgart: Kroner-Verlag, 1996. 883 pp. A collection on the applied ethics debate in Germany. Two important articles on environmental ethics, one by Angelika Krebs and the other by Anthony Leist. (Thanks to Konrad Ott).

--Molddan, Bedrich, and Billharz, Suzanne, eds. *Sustainability Indicators: Report of the Project on Indicators of Sustainable Development*. SCOPE Series No. 58. Chichester, UK: John Wiley & Sons, 1997. 400 pp. UK £ 65.00. This book is the only guide of its kind to indicators and assessment methodologies for sustainable development. Written by experts from a complementary variety of methodologies, it gives a comprehensive survey of the approaches influencing current policy and decision-making. The context is the multi-thematic program of the UN Commission of Sustainable Development (CSD), scheduled to conclude in 1997. The major divisions of the book are: Indicators and Their Use--Information for Decision-Making; The Big Picture--Comprehensive Approaches; Pieces of the Greater Picture; National Level Indicators; Research Needs.

--Lambert, Richard. "The Earth: The Business of the Future--From EGO Energy to ECO Energy." *Population and Environment* 19, no. 1 (1997): 95-107. Two distinctions are offered that

together provide a new form of reference for bonding the human and the Earth: (1) the difference between the emerging domain of ego energy and the yet to be discovered domain of eco energy; and (2) the difference between looking-at and seeing. These two sets of distinctions are then sounded, like echo chambers, against ten guiding ecological statements. The result is a "turn-around perspective": a different vision to be operationalized in individual, community, and business lives. Now seeing clearly, people can respond with eco energy worth of commitment to "the Earth: the Business of the Future."

--Krebs, Angelika. "Ökologische Ethik I: Grundlagen und Grundbegriffe." In *Angewandete Ethik*, pp. 346-85. Ed. Julian Nida-Rümelin. Stuttgart, 1996. (Reprinted in *Naturethik*, ed. Angelika Krebs [Frankfurt, 1997], pp. 337-79.) This article presents a critical taxonomy of arguments for the conservation of nature. Six physiocentric and seven anthropocentric arguments are distinguished. The six physiocentric arguments are: pathocentric (sentience-centered), teleological, reverence-for-life, naturam-sequi, theological, and holistic. Krebs argues that only the first is valid. The seven anthropocentric arguments are: basic-needs, aisthesis, aesthetic-contemplation, natural-design, "Heimat," pedagogic, and the meaning of life. All seven, Krebs contends, are valid. Next, Krebs proposes a position that can be described as a rich anthropocentrism in which nature has both instrumental and intrinsic (aesthetic) value, and in which sentient nature has intrinsic moral value (that is, pathocentrism).

--Schroyer, Trent, ed. *A World That Works: Building Blocks for a Just and Sustainable Society* (New York: Bootstrap Press, 1997). 368 pp. US \$ 19.50. Over thirty-five papers from The Other Economic Summit (TOES) held in June 1997 in Denver, CO. Since 1984, The Other Economic Summit (TOES) has convened to debate alternatives to the official agenda being addressed by the government leaders at the Group of 7 Economic Summit. Trent Schroyer is Director of the Institute for Environment Studies and Professor of Sociology-Philosophy at Ramapo College of New Jersey.

--McCormick, Bill. "SimEve Meets OncoMouse." *Real WORLD* (Spring 1997): 12-13. An entertaining review of works by Donna Haraway (University of California at Santa Cruz), including her book with the unwieldy title (in cyber-jargon) *Modest*Witness@Second*Millennium.FemaleMan*Meets*OncoMouse*, and her video, *Donna Haraway Reads the National Geographics of Primates*. After wading hip-deep in deconstruction jargon, which was inspired by Derrida and has been typified by square brackets, as in [eco]logic, whereby you can both use a word and deny it, we may now have to wade, up to our necks, in academic cyber-jargon. Or, perhaps, you can avoid stepping in. Computer-generated signifiers used by Haraway include trademark, copyright, and other signs. So Nature becomes Nature; Earth becomes SimEarth, sim for simulated. Haraway has been praised by William Cronin in *Uncommon Ground* and by Michael Zimmerman in *Contesting Earth's Future*. Although he says

he's torn between laughing and crying, McCormick, nevertheless, thinks that David Lehman's indelible phrase describes Haraway's work: it "gives bullshit a bad name."

--Knickerbocker, Brad. "Dolphin-Safe Standard Revised for Tuna Fishers." Christian Science Monitor 89 (31 July 1997): 3.

--Walker, Ruth. "World Airs Worries Over Pollution Cuts." Christian Science Monitor 89 (31 July 1997): 6.

--Sneider, Daniel. "On a Nebraska Cornfield, Birdwatchers Respond to the Call of the Cranes." Christian Science Monitor 89 (31 July 1997): 10-11. Excellent story on the crane sanctuaries on the Platte River in Nebraska. Impact of dams and irrigation has caused birds to concentrate in two small stretches of the river.

--Matloff, Judith. "Southern Africa's Oasis May Turn to Dust." Christian Science Monitor 89 (22 July 1997): 1, 9.

--Coatney, Caryn. "Rare Critters in a Wild World Down Under." Christian Science Monitor 89 (22 July 1997): 14. Two Peoples Bay, a gorgeous nature reserve on the southwestern coast of Australia near the town of Albany, is home to many endangered and rarely seen species, including marsupials.

--Knickerbocker, Brad. "Dead End for Logging Roads?" Christian Science Monitor 89 (28 July 1997): 1, 8.

--"Clinton Pledges to Clear Up Tahoe's Ever-Murkier Treasure." Christian Science Monitor 89 (28 July 1997): 4.

--Woodard, Colin. "Bottlenose Whale Could Bottleneck Canada's Gas-Pipe Route." Christian Science Monitor 89 (28 July 1997): 6.

--Rosen, Yereth. "No Roads Lead to Alaskan Town Living Under One Roof--Yet." Christian Science Monitor 89 (21 July 1997): 5. Two of every three residents in Whittier, Alaska, live in one 14-story tower.

--Andreae, Christopher. "A Few Trashy Tales from Scotland." Christian Science Monitor 89 (21 July 1997): 16.

--"More Is Recycled, But There's Also More of It." Christian Science Monitor 89 (21 July 1997): 16. From an EPA report released in June 1997. In 1995, the US had 208 million tons of municipal solid waste, down 1 million from 1994. The per capita rate of trash generation was 4.3 pounds per person per day, down from 4.4 in 1994; of this, 1.1 pound per person per day is recycled, leaving 3.2 pounds per person per day that goes to a waste facility. Of the total, 39% was paper and paperboard (81.5 million tons), 14.3% was yard waste (29.8 million tons), and 6.7% (14 million tons) was food. 40% of paper waste was recycled (33 million tons), and 30% of yard waste was composted (9 million tons). By the year 2000, US trash will be 222 million tons, with containers and packaging the biggest portion (36% by 2000). In 1995, 57% of municipal waste went into landfills; 27% was recycled; and 16% was burned. The "landfill crisis" of the 1980s was a hoax; the crisis, such as it was, was caused by tougher regulations, and never was there a lack of landfill sites. But, on the positive side, the crisis gave a big boost to recycling.

--Snider, Daniel. "Blueprint for a Green Compromise: Forest Gumption." Christian Science Monitor 89 (18 July 1997): 1, 8.

--Plumb, Jessica. "Patagonia's Rugged Beauty Has Its Share of Chills and Thrills." Christian Science Monitor 89 (17 July 1997): 10, 12. Includes details of how to get there via plane, bus, or boat.

--Lampmann, Jane. "Argentina Side Trips Open Door to Wonder and Adventure." Christian Science Monitor 89 (18 July 1997): 13.

--Wood, Daniel B. "A Guide to America's Best Sand, Sun, and Solitude." Christian Science Monitor 89 (16 July 1997): 1, 4. Best wild beaches: Jasper Beach, Maine; Cumberland Island, Georgia; Padre Island, Texas; Shi Shi Beach, Washington; Kalalua Beach State Park, Hawaii.

--Atkin, Ross. "Golf Course With a Conscience." Christian Science Monitor 89 (16 July 1997): 11.

--Knickerbocker, Brad. "Animal Activists Get Violent." Christian Science Monitor 89 (29 August 1997): 1, 5. People for the Ethical Treatment of Animals (PETA) and especially Animal Liberation Front (ALF) actions have been violent. ALF saboteurs destroyed a horse slaughterhouse in Redmond, Oregon, causing \$1 million damage, and also damaged a Fur Breeders Co-op in Sandy, Utah, estimated also at \$1 million.

--Wood, Daniel B. "Suburbia Consumes California's Fruit Basket to the World." Christian Science Monitor 89 (11 September 1997): 1, 18. Farmland is being developed for homes at a rate of 100,000 acres per year.

--Woodard, Colin. "Troubles Bubble Under the Sea." Christian Science Monitor 89 (10 September 1997): 1, 10-11. Pollution and overfishing have altered numerous marine ecosystems worldwide and have endangered several species. Tougher controls and marine preserves are being proposed. Sources of marine pollution are: Ocean dumping, 10%; Shipping and accidental spills, 12%; Airborne emissions from land, 33%; Runoff and discharges from land, 44%; Offshore mining and oil and gas drilling, 1%.

--Feldman, Linda. "Cruelty to Pets--and People--as One Battle." Christian Science Monitor 89 (10 September 1997): 1, 5. Cruelty to animals often indicates or predicts abuse to people as well. The "boys-will-be-boys" attitude is opposed by the Humane Society.

--Lloyd, Jillian. "New Reason for Fighting Pollution (Hint: It's on the Horizon)." Christian Science Monitor 89 (7 October 1997): 1, 4. For first time for purely aesthetic reasons, the EPA has proposed regulations to help clear the air in over 150 US national parks and wilderness areas, including the Grand Canyon, Big Bend, Yellowstone, and Yosemite.

--Knickerbocker, Brad. "Turning Man-Made Creations Back to Nature." *Christian Science Monitor* 89 (26 September 1997): 1, 5. The Sierra Club has proposed breaching the Glen Canyon Dam and draining Lake Powell, the US's second largest water impoundment. At a congressional hearing in Washington, DC., draining the lake was compared to tearing down the Empire State Building in New York City. Yet, from Oregon to Maine, dams that are economically or environmentally detrimental are being taken out. (The Glen Canyon Dam is the target in Ed Abbey's novel *The Monkeywrench Gang*.)

--Francis, David R. "Global Crowd Control Starts to Take Effect." *Christian Science Monitor* 89 (22 October 1997): 1, 9. World population growth rates have peaked, and population itself may soon peak. So says the United Nations. By 2040, world population will peak at 7.7 billion, which is about 1/3 more people than now. When population finally peaks, several benefits will result, according to economists. Poor nations will be able to shift resources from basic goods like food and shelter to raising the standard of living. Famine will be reduced, especially in Africa and Asia. Immigration into the developed nations will ease. And export markets in the developing nations will burgeon. Environmental pressures will ease. By 2050, the ratio of population between the third world and the developed nations will be 7:1; it's 4:1 now. Pessimists, like Stan Becker of Johns Hopkins, doubt the UN's optimism. Becker expects disasters in poorly managed nations, especially famines, and others doubt whether the "green revolution"--high yields in grains and other foods--can match the population growth.

--Nissani, M. "Brass-tacks Ecology." *The Trumpeter* 14, no. 3 (1997): 143-48. The author argues that environmentalists should focus their energies and resources on, and join other humanitarians in, an all-out campaign to eradicate private money from American politics.

VIDEOTAPES AND MULTIMEDIA

The Last Parable, Montana Fish, Wildlife, and Parks, 1987, 29 minutes. Provocative video that seeks to elicit the truth in myth as well as reality in encountering the natural world, in Montana. In our aboriginal past, humans lived with myths, fables, and wonder at nature, but now humans have become scientific and rational, often losing the sense of wonder, but often still yearning for a sense of the primeval. Science and fable are not such uneasy neighbors after all. The development is built around three themes: (1) The Unicorn, the fable, a kind of perennial lure for the as yet unknown. (2) the Bear, the grizzly bear both in fable and fact a powerful, fearful animal from which the aboriginals sought "bear power" for healing and for killing, and which yet teaches us humility and morality when we are in grizzly woods. (3) The hunter, humans, who need not so much the elk as the meaning of the elk the hunter hunts. Humans are hunters for the meaning of nature. The hunt brings us back to the earth. A repeated theme is that if we lose

contact with the elk, the bear, the river, the mountains, wilderness, we lose something of the meaning of life. The "last parable" is gone, and "the universe mourns." Excellent photography and a narrative sure to provoke discussion. "It is no accident that the great philosophers and sages journeyed to the wilderness for inspiration and for understanding the mysteries of the world around them." Montana Department of Fish, Wildlife, and Parks, 930 Custer Avenue West, Helena, MT 59620. 406/444-2426.

World Population. Remains available and is an extremely graphic simulation. Only 6.5 minutes and never fails to startle an audience. A graphic simulation of the history of human population growth. Population trends are simulated on a dark world map, on which lights indicate population. Time passes, indicated by a seconds counter and symbols (the Romans, the Pilgrims, Industry, etc.), with an explosion of population in the last few seconds. Subsequent questions need to be addressed: whether modern industry, agriculture, medicine has increased the carrying capacity of the planet, etc. Produced by Zero Population Growth and Southern Illinois University at Carbondale, a revised version of an earlier tape. \$ 19.95, plus \$ 5 shipping. Zero Population Growth, Inc., 1400 16th Street, N. W., Suite 320, Washington, DC 20036. Phone 202/332-2200.

Affluenza: Consumption Out of Control and What You Can Do About It. Americans make up less than five percent of the world's population but use nearly one third of the Earth's resources. During the last twenty years, American per capita consumption has risen 45 percent, although by several measures their quality of life has gone down. John de Graaf and Vivia Boe, of KCTS/Seattle and Oregon Public Broadcasting use personal stories, commentary, hilarious old film clips, dramatized vignettes and "uncommercial" breaks to illuminate consumerism as a serious social illness. Affluenza is an epidemic of stress, overwork, shopping and debt caused by dogged pursuit of the American dream, an unsustainable addiction to economic growth. Further information, including viewer's guide, on the "Affluenza" website: www.pbs.org/affluenza. Or Coop America 800/58-GREEN. Order through Bullfrog Films 800/543-3764. Bullfrog Films. \$ 29.95 for personal use, \$ 59 for activists and charitable groups such as churches, \$ 250 for licensed institutional use in colleges and universities.

EMPLOYMENT OPPORTUNITY

Middlebury College, Middlebury, VT 05753. The Department of Religion invites applications for a tenure track position in Ethics to begin Fall 1998. The successful candidate will be expected to serve as a member of the College's Interdisciplinary Program in Environmental Studies and consequently should demonstrate mastery of issues pertaining to ethical perspectives on nature and the environment and ability to teach introductory and advanced courses in the field. Candidates should also be prepared to teach an introductory course in religious ethics and

courses on selected issues in applied ethics. Application deadline: December 15, 1997 (November 10 for interviews at AAR/SBL). Send letter of application with a statement of interest, CV, graduate transcript, and three current letters of recommendation (at least two of which speak to teaching promise/ability) to: Professor Larry Yarbrough, Department of Religion, Middlebury College, Middlebury, Vt 05753. EOE/AA. Religion Department homepage: <http://www.middlebury.edu/-rel/>; Environmental Studies homepage: <http://www.middlebury.edu/-es/>. This position is a replacement for Steven Rockefeller, who is retiring, with a career of environmental interests, including the Bill Moyers video, Spirit and Nature, also the book, and recently leading the efforts to introduce a United Nations Earth Charter.

EVENTS

1997

--October 1- 3, 1997. Environmental Justice: Global Ethics for the 21st Century. University of Melbourne, Victoria, Australia. See Conferences above.

--October 2-5, 1997. Hinduism and Ecology Conference, Center for the Study of World Religions, Harvard University. Key speaker: T. N. Khushoo, "Hinduism, Gandhi and Patterns of Development in India." Khushoo is with the Tata Energy Research Institute and former Minister of the Environment in India.

--October 15-18, 1997. Society for Human Ecology, Local and Global Communities: Complexity and Responsibility. Bar Harbor, Maine. Ninth International Conference.

--October 18-25, 1997. 6th World Wilderness Congress, Bangalore, India. Papers invited. For a symposium on Wilderness Designation, Management, and Research, contact in the U.S.: Alan Watson, Leopold Institute, 790 East Beckwith Ave., University of Montana, Missoula, MT 59801. Phone 406/542-4197. For a symposium on Wilderness Inventory: Approaches and Progress, contact Jonathan Miller, Director, Wilderness and Wild Rivers Unit, Environment Australia, G.P.O. Box 1567 Canberra, Australia 2601. Fax: 61-6 217-2095. For a symposium on The Use of Wilderness for Personal Growth, Therapy, and Education, contact Dr. John Hendee, Director, Wilderness Research Center, University of Idaho, Moscow, ID 83843. Fax: 208/885-2268. For a seminar on The Tiger Dilemma--Status, Review, and Recommendations, contact M.A. Partha Sarathy, Hamsini, 1, 12th Cross, Rajmahal, Bangalore, 650 080, India. Fax: 91-80

334-1674. Previous conferences have been in South Africa, Australia, the United Kingdom, the United States, and Norway.

--November 9-11, 1997. Pedagogy for Eco-justice. A conference on the content and process of a pedagogy committed to just and sustainable community in theological education and in churches. Sponsored by the Claremont School of Theology, Claremont, CA, and Theological Education to Meet the Environmental Challenge. Registration through the Center of Respect for Life and Environment, 2100 L Street, NW, Washington, DC 20037. 202/778-6133. Fax 202-778-6138.

--November 11-14, 1997. National Watchable Wildlife Conference, Roanoke, Virginia. "Expanding Horizons: A Diversity of Views, A Diversity of Viewers. Contact: 540-231-5185.

--November 13-16, 1997. Native Religions and Ecology Conference, Center for the Study of World Religions, Harvard University. Key speaker: Oren Lyons, "Spirituality, Reality, and the Dynamics of the Natural World." Lyons is Faithkeeper of the Turtle Clan, Onondaga Nation of the Haudenosaunee (Six Nation Iroquois Confederacy).

--November 20-23, 1997. Desert Fishes Council Annual Meeting, Death Valley National Park, California. Contacts: WWW <http://www.utexas.edu/depts/tnhc/.www/fish/dfc/> or Phil Pister, P.O. Box 337, Bishop, CA 93514 USA, Tel/Fax: 619-872-8751, Email: phildesfish@telis.org

--December 7-10, 1997. Midwest Fish and Wildlife Conference. "Managing Natural Resources: Integrating Ecology and Society." Milwaukee, Wisconsin. Contacts: Gerald Bartelt (Email: barteg@dnr.state.wi.us) or Doug Beard (Email: beardt@dnr.state.wi.us), Wisconsin Dept of Natural Resources, 1350 Femrite Dr, Monona, WI 53716, Tel: 608-221-6344 or 267-9427, Fax: 608-221-6353; WWW: <http://www.dnr.state.wi.us/fh/fish/mwfwc.htm>

--December 27-30, 1997. American Philosophical Association: Eastern Division. Philadelphia Marriott, Philadelphia, PA.

1998

--March 25-28, 1998. American Philosophical Association: Pacific Division. Bonaventure Hotel, Los Angeles, CA.

--April 6-12, 1998. American Ornithologists' Union. Joint annual meeting of several societies. St. Louis, MO. Contact: Bette Loiselle, Dept of Biology, University of Missouri-St Louis, 8001 Natural Bridge Rd., St Louis, MO 63121, Tel: 314-516-6224, Email: bird_stl@umsl.edu; WWW: <http://www.nmnh.si.edu/BIRDNET/>

--April 16-19, 1998. Christianity and Ecology. Center for the Study of World Religions, Harvard University, Cambridge, MA. Environmental ethics grounded in religious traditions and linking the transformative efforts of the world's religions to the larger international movements toward a global ethics for a humane and sustainable future. Contact Mary Evelyn Tucker, Bucknell University, Lewisburg, PA 17837. 717/524-1205.

--May 6-9, 1998. American Philosophical Association: Central Division. Palmer House Hilton, Chicago, IL.

--May 27-31, 1998. Society and Resource Management, Seventh International Symposium. University of Missouri-Columbia. Papers, symposia, etc., invited. Contact: Sandy Rikoon, Rural Sociology, 108 Sociology Bldg., University of Missouri-Columbia, Columbia, MO 65211. Phone 573/882-0861 Fax: 573/882-1473.

--July 13-16, 1998. Society for Conservation Biology. Annual Meeting. Macquarie University, Sydney, Australia. For information, contact: Prof. George McKay, Email: george.mckay@mq.edu.au; or Prof. R. Frankham, SCB98 Program Chair, School of Biological Sciences, Macquarie University, Sydney, NSW, 2109 Australia, Email: rfrankha@rna.bio.mq.edu.au, Fax: +61 2 9850 9237 Attention: SCB 1998 Program. Website: <http://www.bio.mq.edu.au/consbio/>

--August 10-16, 1998. 20th World Congress of Philosophy. Copley Place, Boston, MA, USA.
See Conferences above.

1999

--May 23-27, 1999. Wilderness Science in a Time of Change. University of Montana, Missoula. Includes wilderness values, policy, ethics, and science. Changing societal definitions of wilderness, wilderness management. Call for papers. Natural Resource Management Division, Center for Continuing Education, University of Montana, Missoula, MT 59812. 406/243-4623. 888/254-2544 Email: ckelly@selway.umt.edu. www.wilderness.net

INTERNET ACCESS TO THE ISEE Newsletter

Back issues of ISEE Newsletters have been moved to the University of North Texas website at:

<http://www.cep.unt.edu/ISEE.html>

Newsletters can be searched using the FIND feature on Windows or other software. Newsletters can be Emailed to your local address.

MASTER ENVIRONMENTAL ETHICS BIBLIOGRAPHY

The Master Bibliography in Environmental Ethics, including 1996 update, is available. The Bibliography is available in WordPerfect 5.1 (DOS format) which is easily translated into a Macintosh format (also for WordPerfect in Macintosh, if desired). If you do not use WordPerfect, you can easily translate the files into your local word processing program. The bibliography is in three parts, A-F, G-O and P-Z. The bibliography can be searched for key words. Copies of these disks are available from any of the ISEE contact persons throughout the world (see their names and addresses below) and at selected other locations. Disks are also available from the compiler: Holmes Rolston, III, Department of Philosophy, Colorado State University, Fort Collins, CO 80523, USA. Tel: 970-491-6315 (office); Fax: 970-491-4900; Email: rolston@lamar.colostate.edu Send \$5 to Rolston.

Access via Internet: The Master Bibliography can be accessed from the ISEE World Wide Web Site at:

<http://www.cep.unt.edu/ISEE.html>

The site has a search engine, by name and keyword. Files and search results can be e-mailed to your local e-mail address. The preceding require only ordinary website and e-mail capacities. The bibliography has recently also been placed in PDF files at the same website. This requires an Adobe Acrobat Reader, with which the three files (A-F, G-O, and P-Z) can be downloaded to your local computer. With a PDF browser, the files can be read on line, though this requires a fast computer for convenience.

THE SYLLABUS PROJECT

Course offerings, syllabuses, instructor's vitae, etc., from around the world are accessible at the following Website:

<http://www.bgsu.edu/departments/phil/ISEE>

The project's goal is to collect information from throughout the world about what courses are taught, by whom, in which colleges and universities, and to make this available on website for teachers, administrators, students, prospective grad students, etc. Materials are submitted by the instructors. Many interactive links to environmental sites, home pages, universities, etc.

To submit materials, preferably via Email, contact: Robert Hood, Department of Philosophy, Bowling Green State University, Bowling Green, OH 43403-0222; Email: rhood@bgnet.bgsu.edu.

The materials can also be accessed, along with the ISEE Newsletter, at the ISEE Website homepage:

<http://www.cep.unt.edu/ISEE.html>

ISEE BUSINESS AND ANNOUNCEMENTS

Call for Nominations for ISEE Secretary. Nominations are requested for the position of Secretary of ISEE. The term of office is three years, beginning July 1, 1998, and ending June 30, 2001. The

election will be held by mail-in ballot in early 1998. Please submit the names of nominees to any member of the Nominating Committee by December 31, 1997.

According to the ISEE Constitution, the duties of the Secretary are:

"The Secretary shall keep a record of the meetings of the Society and of the Governing Board; shall give at least four weeks notice to all members of the time and place of all Stated Meetings of the Society; shall call meetings of the Governing Board; shall arrange elections of officers; shall send out lists of nominees to all members in advance of the election of officers; shall report election results to the membership by appropriate means; shall maintain a list of members; shall notify all committees of their appointment. These items of information may be disseminated by means of the Newsletter of the International Society of Environmental Ethics, which the Secretary shall distribute. In the absence of the President and Vice President, the Secretary shall preside at meetings of the Society."

Members of the Nominating Committee are: Prof. Victoria Davion, Chair of the ISEE Nominating Committee, Dept of Philosophy, 107 Peabody Hall, University of Georgia, Athens, GA 30602 USA; Tel: 706-542-2827; Email: vdavion@uga.cc.uga.edu; Prof. Alan Holland, Dept of Philosophy, Lancaster University, Lancaster LA1 4YG, UK; Fax: 44 (Country Code) (0) 524 (City Code) 846102; Email: A.Holland@lancaster.ac.uk; Prof. Roger Paden, Dept of Philosophy and Religious Studies, George Mason University Fairfax, VA 22030-4444 USA; Tel: 703-993-1265; Email: rpaden@gmu.edu; Prof. Gary Varner, Dept of Philosophy, Texas A&M University, College Station, TX 77843-4237 USA; Email: g-varner@tamu.edu

Current Officers of ISEE (Executive Board)

President: Prof. J. Baird Callicott, Dept of Philosophy, University of North Texas, Denton Texas 76203 USA; Dept Tel: 817-565-2266; Email: callicot@terrill.unt.edu; term to expire end of academic year 1999-2000.

Vice-President and President-Elect: Prof. Kristin Shrader-Frechette, Dept of Philosophy, University of South Florida, 4202 East Fowler Avenue, CPR 259, Tampa, Florida 33620 USA; Tel: 813-974-5224 (Office), 813-974-2447 (Dept); Fax: 813-974-5914; Email: none; term to expire at the end of the academic year 1999-2000, when term as President begins.

Secretary: Prof. Laura Westra, Dept of Philosophy, University of Windsor, Windsor Ontario N9B 3P4 CANADA; Tel: 519-253-4232; Fax: 519-973-7050; term to expire end of academic year 1997-98.

Treasurer: Ernest Partridge, P.O. Box 9045, Cedar Pines Park, CA 92322. Tel: 909-338-6173. Fax: same as telephone, but call first. Email: gadfly@igc.org; term to expire end of academic year 1998-99.

Newsletter Editor: Prof. Jack Weir, Philosophy Faculty, Morehead State University, UPO 662, 103 Combs Bldg, Morehead Kentucky 40351-1689 USA; Tel: 606-783-2785, 606-784-0046; Fax: 606-783-5346; Email: j.weir@morehead-st.edu

Nominating Committee:

--Prof. Victoria Davion, Chair of the ISEE Nominating Committee, Dept of Philosophy, 107 Peabody Hall, University of Georgia, Athens, GA 30602 USA; Tel: 706-542-2827; Email: vdavion@uga.cc.uga.edu

--Prof. Alan Holland, Dept of Philosophy, Lancaster University, Lancaster LA1 4YG, UK; Fax: 44 (Country Code) (0) 524 (City Code) 846102; Email: A.Holland@lancaster.ac.uk

--Prof. Roger Paden, Dept of Philosophy and Religious Studies, George Mason University Fairfax, VA 22030-4444 USA; Tel: 703-993-1265; Email: rpaden@gmu.edu

--Prof. Gary Varner, Dept of Philosophy, Texas A&M University, College Station, TX 77843-4237 USA; Email: g-varner@tamu.edu

ISEE Newsletter PUBLICATION AND SUBSCRIPTION INFORMATION

TO SUBMIT ITEMS FOR PUBLICATION:

Prof. Jack Weir is Editor and Prof. Holmes Rolston, III, Co-editor, of the ISEE Newsletter. Items should preferentially be sent to Prof. Weir. Please do not send items to both Weir and Rolston

since this results in duplicated efforts. Please send information for the Newsletter electronically, either on a disk (3 1/2 inch) or via Email (preferred):

j.weir@morehead-st.edu

The parcel post address is: Jack Weir, Philosophy Faculty, UPO 662, 103 Combs Bldg., Morehead State University, Morehead Kentucky 40351-1689 USA. Tel: 606-784-0046 (Home Office, Voice Mail); 606-783-2785 (Campus Office, Voice Mail); 606-783-2185 (Dept of English, Foreign Languages and Philosophy); Fax: 606-783-5346 (include Weir's name on the Fax).

Scholarly articles are not published. Very brief reports of research and publications will be considered. Brief accounts of "Issues" of philosophical importance will be considered. Calls for Papers and Conferences should be limited to 150 words.

Due to the large number of submissions, receipt of items cannot be acknowledged and publication cannot be guaranteed. Submissions will be edited.

SOCIETY DUES, SUBSCRIPTIONS, AND ADDRESS CHANGES:

U.S. and Canada: Send dues, subscriptions, and address changes to: Professor Laura Westra, ISEE Secretary, Dept of Philosophy, University of Windsor, Windsor, Ontario N9B 3P4 CANADA; Email: westra@uwindsor.ca

Outside the U.S. and Canada: Send dues, subscriptions, and address changes to the regional contact person named below. The Newsletter is duplicated and mailed by the regional contact person. Dues, renewals, new subscriptions, and address changes should be sent to these regional contact persons. The dues are used by the contact person to pay for duplication and mailing of the Newsletter.

If you are uncertain where to send dues, subscriptions, or address changes, send them to Prof. Westra (address above).

NOTE: NEWSLETTERS WILL NOT BE MAILED TO ANYONE WHOSE DUES ARE NOT PAID FOR THE CURRENT YEAR.

REGIONAL CONTACT PERSONS AND CORRESPONDENTS:

Africa

Prof. Johan P. Hattingh, Department of Philosophy, University of Stellenbosch, 7600 Stellenbosch, South Africa. Contact him with regard to membership and dues, again the approximate equivalent of \$15 U.S., but with appropriate adjustment for currency differentials and purchasing power. Hattingh heads the Unit for Environmental Ethics at Stellenbosch. Phone: 27 (country code) 21 (city code) 808-2058 (office), 808-2418 (secretary); 887-9025 (home); Fax: 886-4343. Email: jph2@maties.sun.ac.za

Australia and New Zealand

The contact person is Robert Elliot. Send membership forms and dues of \$15.00 Australian (\$10.00 for students) to: Prof. Robert Elliot, Dean of Arts; Sunshine Coast University College; Locked Bag 4; Maroochydore South, Qld 4558, AUSTRALIA; Tel: 61 (country code) 74 30 1234; Fax: 61 74 30 1111; Email: elliott@mail.scuc.edu.au

Canada

Laura Westra, ISEE Secretary, Dept of Philosophy, University of Windsor, Windsor Ontario N9B 3P4 CANADA; Tel: 519-253-4232; Fax: 519-973-7050.

China: Mainland China

Professor Yu Mouchang, Institute of Philosophy, Chinese Academy of Social Sciences, Beijing 100732, P. R. China.

Europe: Eastern Europe

The contact person is Prof. Jan Wawrzyniak. He is on the faculty in the Department of Philosophy at Adam Mickiewicz University of Poznan, Poland. Members and others should contact him regarding the amount of dues and the method of payment. He also requests that persons in Eastern Europe send him information relevant to a regional newsletter attachment to this newsletter. University address: Prof. Jan Wawrzyniak, Instytut Filozofii, Adam Mickiewicz University, 60-569 Poznan, Szamarzewskiego 91c POLAND. Tel: 48 61 841-72-75 (24 hours) (home). Fax: 48 61 847-70-79 (8 am-3 pm) or 48 61 847-15-55 (24 hours). Home address: 60-592 Poznan, Szafirowa 7, POLAND. Checks sent to his home have more security. Email: filozof@plpuam11.amu.edu.pl

Europe: Western Europe and the Mediterranean

The contact person is Wouter Achterberg. Send the equivalent of \$15 U.S. to Prof. Achterberg. Address: Faculty of Philosophy, University of Amsterdam, Nieuwe Doelenstraat 15, 1012 CP Amsterdam, Netherlands. He reports that it is difficult to cash checks in this amount without losing a substantial part of the value of the check and encourages sending bank notes and cash directly to him, as it is reasonably safe. Contact him if in doubt regarding what currencies he can accept. Fax: 31 (country code) 20 (city code) 5254503. Phone: 31-20-5254530.

Pakistan and South Asia

Nasir Azam Sahibzada, Senior Education Officer, WWF-Pakistan (NWFP), UPO Box 1439, Peshawar PAKISTAN. Tel: (92) (521) (841593). Fax: (92) (521) (841594). Email: wwf!nasir@wwf.psh.imran.pk

United Kingdom

Keekok Lee, Department of Philosophy, University of Manchester, Oxford Road, Manchester M13 9PL UK. Tel: +44 (0)161 275 3196. Fax: +44 (0)161 275 3613. Email: MFESTKKL@art.man.ac.uk. Dues are £6.50 UK.

United States of America

Ned Hettinger, Philosophy Dept, College of Charleston, Charleston South Carolina 29424 USA. Tel: 803-953-5786 office, 803-883-9201-home. Fax: 803-953-6388. Email: HettingerN@CofC.edu

Holmes Rolston, III, Dept of Philosophy, Colorado State University, Fort Collins Colorado 80523 USA; Email: rolston@lamar.colostate.edu; Tel: 970-491-6315 (Office); Fax: 970-491-4900.

Jack Weir, Philosophy Faculty, Morehead State University, UPO 662, Morehead Kentucky 40351-1689 USA; Email: j.weir@morehead-st.edu; Tel: 606-784-0046 (Home Office); Fax: 606-783-5346.

The Newsletter of the International Society for Environmental Ethics is published quarterly by the International Society for Environmental Ethics (ISEE). Jack Weir is the Editor and Holmes Rolston, III, is Co-editor. The Spring issue is published and mailed in April; the Summer issue in July; the Fall issue in October; and the Winter issue in January.

Requests for subscriptions and address changes should be sent to Ernest Partridge, ISEE Treasurer, at the address below.

Items for inclusion in future issues of the Newsletter should be sent to Jack Weir, the producing editor, via Email (preferred) or by disk. Items received will not be acknowledge. If received after the deadline, items will be held until the next issue. Items will be edited. Inappropriate items will not be included. Deadlines for receipt of materials are: April 1st, July 1st, October 1st, and January 1st. Send items to:

j.weir@morehead-st.edu

Postal address: Jack Weir, Philosophy Faculty, UPO 662, 103 Combs Building, Morehead State University, Morehead Kentucky 40351-1689 USA. Tel: 606-784-0046 (Home Office, Voice Mail), 606-783-2785 (Campus Office, Voice Mail), 606-783-2185 (Secretary, Dept of English, Foreign Languages and Philosophy); Fax: 606-783-5346 (include Weir's name on the Fax).

SUBSCRIPTION FORM

Please enroll me as a member of the International Society for Environmental Ethics.

Enclosed are dues: _____ . (Annual dues are: \$15 U.S.; \$20 Canadian; £6.50 UK and Europe. Student dues are: \$10 U.S. or Canadian, \$15 foreign. Please send comparable amounts based on current exchange rates.)

Name Phone

Position or Affiliation

Address (Include Postal Code)

Fax:

Email:

SEND with Payment to: Regional Contact Person; or Ernest Partridge, ISEE Treasurer, P.O. Box 9045, Cedar Pines Park, CA 92322 USA. Tel: 909-338-6173. Fax: same as telephone, but call first. Email: gadfly@igc.org