
International Society for
Environmental Ethics *Volume 9, No. 4, Winter 1998*
Newsletter

General Announcements

Website information on graduate study in environmental ethics. The ISEE Website information on graduate studies in environmental ethics has been updated, and should be recommended to interested students:

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

This address will bring a menu of a dozen or more universities featuring graduate programs in environmental philosophy and ethics. At the bottom of the first one of these lists, take "Graduate Studies and Theses Completed--Various Universities" for some theses completed at various schools, both in the U.S. and internationally. This last menu choice will take you to:

<http://lamar.colostate.edu/~rolston/grad-st.htm>

Or you can also go to this address directly. This main site is at the University of North Texas and is maintained by Environmental Philosophy, Inc., although these links take you to other schools and you can get their websites directly by following these links. The "Graduate Studies and Theses Completed--Various Universities" text is maintained by Holmes Rolston at a Colorado State University site. Take a few minutes to browse through the theses recently completed in the field, both Ph.D. and M.A. theses. You will be surprised at the activity.

Finnish anthology sold out. The anthology by Markku Oksanen and Marjo Rauhala-Hayes, eds., *Ympäristöfilosofia: Kirjoituksia ympäristönsuojelun eettisistä perusteista* (Environmental Philosophy: Critical Sources in Environmental Theory and Ethics (Helsinki: Gaudeamus, Oy Yliopistokustannus, Finnish University Press, 1997) has sold out the first press run of 1,000 copies, and a second printing is anticipated. This is an excellent sale for a book published in Finnish.

Gray Whale Website:

<http://www.graywhale.net/home.html>

Information on efforts to save gray whales in the Pacific Northwest, trying to promote sustainable uses of the gray whale population against hunting by a Native American population.

Ernest Partridge offers a website with news and opinion regarding environmental ethics and policy:

www.igc.org/gadfly

There is an assortment of papers, published and in progress, news and notes, bibliographies and other research tools, and more. Partridge is a consultant, writer, and lecturer in environmental ethics and policy, a research associate at the Department of Philosophy, University of California, Riverside, and treasurer of the International Society for Environmental Ethics.

Environmental Cyber-Library. A site operated by the Committee for the National Institute for the Environment, offering the National Library for the Environment:

<http://www.cnie.org>

Features U.S. government reports, and over 300 electronic journals, also access to various databases. Also a Directory of Higher Education Environmental Programs.

The Humane Society of the United States (HSUS) is compiling a list of courses offered at American and Canadian universities/colleges that address animal ethics, animal rights, and/or animal welfare issues. This is part of a project whose aim is to foster more widespread availability of such courses in the curriculum. If you instruct such a course, or know of anyone who does, please contact Dr. Jonathan Balcombe at: The HSUS 2100 L Street, NW, Washington, DC 20037; balcombe@ix.netcom.com; tel 301-258-3046; fax 301-258-7760. Dr. Balcombe will be happy to send you a copy of the course listing.

A two-part symposium on "Sociological Perspectives on Global Environmental Change," edited by Jose A. Prades and Riley E. Dunlap, is being published in *International Sociology*. Part One was published in the December 1998 issue (Vol. 13, No.4), and consists of the following articles: Eugene A. Rosa and Thomas Dietz, "Climate Change and Society: Speculation, Construction and Scientific Investigation." Reprints available from osa@wsu.edu

Allan Mazur, "Global Environmental Change in the News: 1987-90 vs. 1992-96." Reprints available from amazur@syr.edu

Riley E. Dunlap, "Lay Perceptions of Global Risk: Public Views of Global Warming in Cross-National Context." Reprints available from dunlap@wsu.edu.

Michael Redclift and Colin Sage, "Global Environmental Change and Global Inequality: North/South Perspectives." Reprints available from m.r.redclift@cc.keele.ac.uk

Part Two, consisting of articles by Prades, Markku Wilenius and by Herbert Giner and David Tabara, will appear in the March, 1999 issue (Vol. 14, No. 1).

Contact: Prof. Riley E. Dunlap, Boeing Distinguished Professor of Environmental Sociology, Department of Sociology and Department of Rural Sociology, Washington State University,

Pullman, WA 99164-4020; Tel (509) 335-3810; Fax (509) 335-2125; dunlap@wsu.edu or dunlapr@earthlink.net

Free biweekly update of news about the animal rights movement from an anti-animal rights perspective. Covers everything from animal rights protests and actions to recent medical advances due to animal experimentation. Available on the web and via email subscription (send email to majordomo@carnell.com with SUBSCRIBE ARNEWS in the body of the message to subscribe). Contact: Brian Carnell Email: brian@carnell.com

CONFERENCES AND CALLS FOR PAPERS

Call for Papers. Fifth International Interdisciplinary Conference on the Environment, Baltimore, Maryland. 23-26 June 1999. Contact: Demetri Kantarelis or Kevin L. Hickey, IEA/Kantarelis-Hickey, Assumption College, 500 Salisbury Street, Worcester, MA 01615. Phone: (508) 767-7557 (Kantarelis), (508) 767-7296 (Hickey). Fax: (508) 767-7382; E-mail: (Kantarelis) dkantar@assumption.edu or (Hickey) khickey@assumption.edu; Website: <http://champion.iupui.edu/~mreiter/iea.htm>

"Linking Environmental Studies, Theology, Science: A 21st-Century Challenge for Catholic Universities and Colleges." May 14 - 16, 1999. University of Portland in Portland, Oregon (USA). Sponsored by the Environmental Justice Program of the United States Catholic Conference and the University of Portland. Plenary panel presentations include: "Linking Ecology, Theology, and Other Disciplines, the Intellectual Challenge for Catholic Colleges and Universities," "Foundations of Catholic Environmental Thought," and "Mapping the Future." Workshops include: "Business Curricula and a Sustainable Future", "Ecology and Feminism: Theological Reflections", "Catholic Social Teaching, Minority Communities, and Eco-Justice", "Science and Theology Converging", "History, Politics, and Catholic Environmental Thought." Also to be discussed is a draft Pastoral Letter that the Catholic Bishops of the Northwest are writing on the Columbia River and the people who live along it. Off-campus "plunge" experiences include a Superfund site, a stand of old-growth forest, a native American presentation on the state of the Columbia River, and an example of environmentally sensitive building design and construction. Distinguished academics from all across the US will make presentations. Working sessions will be conversational and interactive. Anyone interested in participating should contact Steven A. Kolmes, Director of the Environmental Studies Program, University of Portland, 5000 N Willamette Blvd, Portland, Oregon 97203 USA; Email: kolmes@up.edu; Tel: 503-943-7291

Request for speakers/topics/ meet-the-author sessions for the Eastern APA-ISEE meeting, December 1999: Please send all suggestions for APA-ISEE Eastern sessions (abstract, speakers, affiliations, addresses, phones, faxes, emails, titles of talk, short paragraph on the stature of each speaker and the importance of the paper/topic) to ISEE VP/President-Elect, Kristin Shrader-Frechette, Department of Philosophy, 336 O'Shaughnessy Hall, University of Notre Dame, Notre Dame, IN 46556. Kristin's goal is to have one ISEE-APA session that focuses on the work of distinguished senior scholars in environmental ethics and one session that focuses on the work of younger scholars. All suggestions welcome.

Fourth International Conference of the Russian Chapter of the International Society for Ecological Economics (also abbreviated ISEE). 5-9 July 1999. Saratov, RUSSIA. General Theme: Nature and Society of the Next Millennium: Globalization and Regional Ecological Economic Problems. The conference is an international forum to discuss advances in ecological economic approaches to decision and policy making by government and business in transition to sustainable development. Specifically, its aim is to exchange findings in the above areas, expose Russian scholars to relevant international research and practice, discuss the Russian experience to date, and recommend further efforts contributing to sustainable development. Speakers include Dr. Ernest Partridge (USA). For more information: Dr. Paul SAFONOV, ISEE Russian Chapter, E-mail: Paul.Safonov@ipu.rssi.ru

ISEE Sessions at the American Philosophical Association: Pacific Division, 31 March - 3 April 1999, Claremont Hotel, Berkeley, California USA. First Session. Philip Cafaro (Southwest State University, MN), "For a Grounded Conception of Wilderness, and More Wilderness on the Ground." Response by Mark Woods (University of San Diego). Jason Kawall (Brown University), "Is (Merely) Stalking Sentient Animals Morally Wrong?" Response by William McKinney (Southeast Missouri State University). Second Session. Mark A. Michael (Austin Peay State University), "Modifying Nature vs. Interfering with Nature: A Distinction Without a Difference?" Response by Don Mayer (Oakland University).

ISEE Sessions at the American Philosophical Association: Central Division. New Orleans, Louisiana USA, 5-8 May 1999. First Session. Topic: "The Land Ethic Revisited." Chair and Commentator, Peter List (Oregon State University). Speakers: Peter Wenz, (University of Illinois at Springfield), "Nature's Prescription: Reductionism and the Is/Ought Dichotomy." Kristin Shrader-Frechette (University of Notre Dame), "The Land Ethic: Policy Assesses and Epistemological Liabilities." Laura Westra (University of Windsor), "Aldo Leopold and the Ethics of Integrity." Burcu Gurkan (University of Windsor), "The Land Ethic: Hoslitic or Not?" Second Session. Topic: "Biotechnology and Environmental Ethics - The Interface." Chair and Commentator: M. C. Tallacchini (University of Firenze, Italy). Speakers: Paul Thompson (Purdue University), "The Environmental Ethics Case for Crop Biotechnology." Alan Holland (University of Lancaster, UK), "In the Beginning Was the Word? A Critique of Information Metaphors in Genetics." Gary Comstock (Iowa State University), "Why We Should Produce Transgenic Animals From an Animal Rights Perspective." Laura Westra (University of Windsor), "Biotechnology, Transgenics and MicroIntegrity."

The Italian Office of the World Health Organization (WHO) of the United Nations convened a meeting of some of the members of the "Global Integrity Project" in their Rome office, Dec. 30, 1998. Colin Soskolne (Epidemiology - Canada) worked with the director, Dr. Roberto Bertollini, and a number of doctors and other scientists on a document suggesting policy emphasis on environmental disintegrity and its impacts on life. When completed in February 1999, the document will be forwarded to the head Office of WHO in Geneva, to UNEP, and to FAO. Participants included Laura Westra (Canada), William Rees (Canada), Orié Loucks (U.S./Canada), and Jim Karr, who contributed his new video "Fresh Waters Flowing." The video is available from Jim Karr, 104 Fisheries Center, Box 35798, University of Washington, Seattle WA; Fax: (206) 543-2025; email: <jrkarr@u.washington.edu>. The document itself will be

available in the forthcoming volume of the project, by David Pimentel, Laura Westra, and Reed Noss.

A workshop funded by NATO on the Global Integrity Project is projected for 27-29 June 1999 in Budapest, Hungary, with many participants from Eastern Europe as well as those involved in the project. Submitted papers might still be accepted. Please send abstracts to Prof. Philippe Crabbe, Director, Institute for Research on Environmental Economics, University of Ottawa; Fax: (613) 562-5873; email: crabbe@aixl.uottawa.ca.

Call for Papers. Utah State University Philosophy Colloquium. Topic: Environmental Aesthetics. October 8-10, 1999, Eccles Conference Center, Utah State University, Logan, Utah USA. Featured speakers are Bruce Foltz (Eckerd College), Andrew Light (SUNY--Binghamton), and Holmes Rolston III (Colorado State University). Submissions are welcome on any aspect of environmental aesthetics. Papers are preferred, but abstracts will be accepted. The deadlines for submissions is April 1, 1999. Please mail to: Prof. Diane Michelfelder, Department Head, Languages and Philosophy, Utah State University, Logan, UT 84322-0270. For further information, please e-mail at dmichel@cc.usu.edu or see the webpage at <http://www.usu.edu/~langphil/eaconf.html>.

The Society for Conservation Biology will hold its 1999 annual meeting from 17-21 June at the University of Maryland, College Park, Maryland USA (which is in the Washington, DC, area). Symposia proposals were due 21 October. Abstracts for contributed papers are due 21 January 1999. SCB meetings are organized similar to other meetings of scientists, primarily to present summaries of research with the presumption that a detailed written report is available. Consequently, contributed paper presentations are limited to 20 minutes, and discussion of these papers from the floor is usually very brief. Symposia are on topics of current interest and usually are panels of four or more speakers lasting 2-3 hours with discussion. Contributed papers may be submitted electronically (preferred) and must strictly conform to submission guidelines. For information about the guidelines and to submit a proposal, visit the meeting's Website at the address below, or see the November 1998 issue of the SCB Newsletter (also accessible online at <http://conbio.rice.edu/scb>). Most relevant submissions by professionals are accepted. Housing options usually range from camping and dormitories with optional meal plans to expensive luxury hotels. Two special attractions of SCB meetings are: plenary presentations by outstanding scholars, government officials, philosophers, activists, and persons affiliated with NGOs; and a variety of field trips led by some of the world's foremost biologists. For this meeting, a gala at the National Zoo is being planned.

The general program chair for the meeting at the University of Maryland is David Inouye, Tel. 301-405-6946, Fax 301-314-9358, Email di5@umail.umd.edu. The meeting's website is: <http://www.inform.umd.edu/scb/>

For many years, ISEE has sponsored symposia and sessions at SCB, and these have been coordinated by Phil Pister and Jack Weir. SCB is the largest international organization of research biologists, wildlife ecologists, foresters, and others whose primary purpose is environmental conservation and preservation. The prestigious journal *Conservation Biology* is published by SCB. SCB has numerous chapters for students at universities throughout the world. SCB's constitution requires that one member of the Board of Governors be an environmental philosopher/ethicist.

Call for Papers. The Sigurd Olson Institute of Northland College, Ashland Wisconsin USA, will be hosting a conference entitled "Wilderness Horizons: An Interdisciplinary Wilderness Conference" on September 23-26, 1999. Gary Snyder will be the keynote speaker. Submitted proposals will be considered for concurrent sessions. Plenary sessions will focus on the following areas: "Future Trends in Wilderness Management and Policy," "Wilderness and Native American Worldviews," "Great New Wilderness Debate: Where Now?" "Wilderness Values and Contemporary Christian Thought," and "Wilderness and Regional Issues of Sustainability." Northland is also attempting to find a publisher for the conference papers. For more information or to submit a paper, contact Clayton T. Russell, Sigurd Olson Environmental Institute, Northland College, Ashland, WI 54806; Tel: (715) 682-1491; Email: crussell@wheeler.northland.edu; Website: www.northland.edu/soei. Papers in the area of "Great New Wilderness Debate: Where Now?" can be sent directly to Michael P. Nelson, Philosophy, University of Wisconsin-Stevens Point, Stevens Point, WI 54481; Email: m2nelson@uwsp.edu

Symposium on Genes and Development. 19-20 March 1999. Institut für Geschichte und Ethik der Medizin (IfGEM) at the University of Basel, Switzerland. Symposium theme: "Genes and Development: Interacting Processes or Hierarchical Organization? New Theoretical Approaches to Developmental Biology and Their Ethical Implications." Current results in molecular and developmental biology challenge traditional concepts of the role of the genome in the developing organism. This interdisciplinary symposium aims at an evaluation of new theoretical approaches in the field that are directed toward an integration of genetics and developmental biology: Developmental Systems Approach, Process Structuralism, Methodical Constructivism, Hermeneutics of Description, Process-concept of the Molecular Gene. Speakers include: Markus Affolter (Basel), Brian Goodwin (London), James Griesemer (Davis), Paul Griffiths (Sydney), Mathias Gutmann (Bad-Neuenahr-Ahrweiler), Evelyn Fox Keller (Boston), Gerd Mueller (Wien), Eva M. Neumann-Held (Bad Neuenahr-Ahrweiler), Susan Oyama (New York), Jackie Leach Scully (Basel), Christoph Rehmann-Sutter (Basel) and others. IfGEM is affiliated with the MGU-research project 'Genome and Organism' (Christoph Rehmann-Sutter/Eva M. Neumann-Held). In collaboration with the Swiss Society for Biomedical Ethics SGBE-SSEB and the 'European Academy for the Study of Consequences of Scientific and Technological Advances, Bad-Neuenahr-Ahrweiler GmbH. For more information: Institut für Geschichte und Ethik der Medizin, "Genes and Development," University of Basel, Schoenbeinstr. 18-20 CH-4056 Basel. Fax: ++41 (0)61 267 3190. Email: kamberr@ubaclu.unibas.ch

Conference on John Ray. 18-21 March 1999. "John Ray and His Successors: The Clergyman as Biologist." Braintree, Essex, UK. Organised by the John Ray Trust, the Institute of Biology's History Committee, and the Society for the History of Natural History. Keynote speakers: John Brooke "Wise Men Nowadays Think Otherwise", Michael Reiss "On Being a Biologist and a Cleric", plus others, including Profs. Paul Foster, Chris Smith, Sandy Baker, David Knight, Mark Seaward, Edward Larson, Peter Bowler. Registration: before Jan 1, £90 (fulltime students, £30); accommodations, etc., are extra. Bookings and details from Janet Turner, John Ray Trust, Town Hall Centre, BRAINTREE, Essex, CM7 3YG United Kingdom. Tel (+44) 1376-557776; Fax - 344345.

CALL FOR PAPERS. The Society for Applied Philosophy, Annual Conference, in Conjunction with ISEE. 27-29 June 1999. Mansfield College, Oxford University, UK. Theme: "Moral and Political Reasoning in Environmental Practice." For more information, see the previous Newsletter or contact the Conference Co-ordinator, Adam Hedgecoe, Dept. of Science and Technology Studies, University College London, Gower Street, London WC1E 6BT (tel: 0171 387705 ext.2094).

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 Notre Dame, Notre Dame, IN 46556; Tel 219-631-5000 (Campus), 219-631-7579 (Philosophy Dept.); Fax 219-631-8209 (Philosophy Dept. Fax); Email: Kristin.Shrader-Frechette.1@nd.edu

--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 (ISEE Treasurer), P.O. Box 9045, Cedar Pines Park, CA 92322 USA. Tel: 909-338-6173. Fax: 909-338-7072. Email: gadfly@igc.org

CALL FOR PAPERS. "Wilderness Science in a Time of Change." University of Montana, Missoula, 23-27 May 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

ISSUES

America's splurging energy use. In the 1970s and early 80s, the U.S. reduced its energy consumption even while population grew and the economy expanded. People installed thicker insulation and tighter windows, appliances and engines were made more efficient, business cut its energy use, and people wore sweaters instead of turning up their thermostats. After falling dramatically in the 1970s and early 80s, average American energy use is back up to nearly record levels (despite some gains in energy efficiency). Here are some of the reasons why. Energy prices today are lower than they were 25 years ago. Adjusting for inflation, gas is \$1 a gallon today compared to \$1.10 in 1973. A gallon of gasoline is now cheaper than a gallon of bottled water! U.S. gas prices are half what they are in Europe and Japan and U.S. consumers use twice as much energy per person as do the Europeans or the Japanese. Although houses are more energy efficient per square foot, they are getting bigger. Since 1970, average household size shrunk by one sixth and average new home sizes has grown by a one third (from 1600 to 2100 square feet). Standard ceiling height has gone from eight to nine feet. Like the trend in sports

utility vehicles (SUVs), we can't seem to make houses big enough. Furthermore, homes are now stuffed with energy-hungry features air conditioners are now in 80% of homes (up from 40%), 57% of homes now have dishwashers (up from 17%), plus many homes now have Jacuzzis, security systems, computers, an on and on. Many of these gadgets suck electricity full time; they are never really off (though dormant, they are ready at the push of a button). Today in the U.S., energy consumption per person in the home is the same as in 1973. Electric utilities are now cutting the reimbursements they used to give for installing more efficient heating, cooling, and lighting.

On the roads, next year Americans will burn more fuel per person than in 1973, before the government set automobile fuel efficiency standards. Today people are driving more. Suburbs continue to sprawl--the average commute has grown one third in the last dozen years (to eleven and a half miles). Nearly one in five households has three or more cars (up from one in twenty-five in 1970). More people are driving light trucks (minivans, SUV and pickups) which now account for 50% of auto purchases and are exempt from fuel efficiency and some pollution standards. In the 1990s, average fuel efficiency of autos has not increased (after rising for a decade and a half). Cars are becoming more powerful: Average auto horsepower is up from one hundred to one hundred-fifty in the last dozen years. Only 5% of Americans ride mass transit and that number is declining. Business use of energy has also jumped up 37% in last dozen years, despite the economy's shift from smokestack industries to software and entertainment (business use of energy had dropped 18% from 1973 to 1983).

With greater energy use comes greater dependence on foreign oil (now 50%, up from 35% in 1973) and increasing military expense of defending access to it. The more energy we use, the more difficult it will be to try to stem possible global warming. The U.S. is committed to reducing our greenhouse gas output by 7% (from 1990) levels by the year 2010; this is a 33% cut in projected growth of our greenhouse emissions. Our energy use also is responsible for oil pipe lines and drilling platforms in environmentally sensitive areas, and thus this use contributes to oil spills and related environmental degradation. Finally, almost all of the energy we use comes from fossil fuels, which are not a renewable source of energy and hence such a lifestyle is not a sustainable one. See Allen Myerson, "U.S. Splurging on Energy After Falling Off its Diet," New York Times (10/22/98): A1.

Debate over policy to stem environmental racism. A U.S. Environmental Protection Agency (EPA) policy aimed at lessening the disproportionate burden of pollution endured by poor and minority communities has provoked a strong reaction from State environmental agencies and business groups. The EPA's office of civil rights has issued guidelines suggesting that if a pollution permit issued by a state contributes to a pattern of disproportionate pollution in a minority neighborhood, then it may be treated as a violation of the anti-discrimination provisions of the Civil Rights Act of 1964. Thus even if pollution permits that states issue to businesses passes all the ordinary tests of environmental laws, states could face a loss of Federal money or a possible a lawsuit if such permits contribute to environmental injustice. A U.S. Chamber of Commerce official objects that the policy runs counter to Federal programs designed to bring jobs and economic opportunities to low-income and minority areas and that it undermines the effort to clean-up closed contaminated industrial sites and build factories there. Over 50 complaints challenging the location of incinerators, dumps, and factories have been filed over the last 5 years. . Environmental justice advocates think the policy is too weak and should make it clear that discrimination can occur not just by exposure to pollutants but also by increase in

health risks, changes in land values, and the stigma of living near undesirable installations. See John Cushman, "Pollution Policy is Unfair Burden, States Tell E.P.A.," *New York Times* (5/10/98): A1.

Rivers and Private Property Rights: Recreational Use Prevents Closing. In a major case that greatly expands the public's right to use rivers on private land, a New York Court of Appeals adopted a new "recreational use" test for when a waterway is navigatable and thus beyond a private landowner's power to close. The Court replaced the old common law standard of a river's capacity for "commercial use" in bringing goods to market with a new test according to which recreational boating alone gives the public a right to use the river. The case dealt with a 12-mile stretch of the South Branch of the Moose River that crosses a 60,000 acre private preserve. The owners of the preserve had kept the river closed to public use for over a century. The ruling also recognized the public's right to portage around obstacles in a stream. See Gary Spencer, *New York Law Journal* (12/18/98).

Lyme disease and lizards. Lyme disease has been spreading in the Eastern U.S., with 100,000 cases in the last 16 years. But not in the Western U.S. The disease is carried by a bacteria in a tick. Researchers have found that the tick also bites the common, six-inch, blue-bellied fence lizard of the U.S. West, and that the lizard have a potent, bacteria-killing protein that destroys the bacteria in the ticks. The result: half the ticks in the East carry the disease but as few as one in a hundred in the West. So Westerners can thank the lizards as they hike their trails more safely. They can also realize that life is more complicated than we think. Brief story in *Nature Conservancy*, January-February 1999, p. 7.

Environmental prayer. Prince Philip, asked to suggest a favorite Scriptural passage, psalm, or hymn for a book of spiritual readings by Lady Cassidi, decided to write his own environmental prayer:

"O Lord, the creator of the universe and author of the laws of nature, inspire in us thy servants the will to ensure the survival of all the species of animals and plants, which you have given to share this planet with us. Help us to understand that we have a responsibility for them and that 'having dominion' does not mean that you have given us the right to exploit the living world without thought for the consequences. Through him who taught us that Solomon in all his glory could not compare with the beauty of the flowers in the field." Story in *The Daily Telegraph*, September 23, 1998.

Environmental Ethics in China

China's environment. China has 1/14th of the total land area on Earth, 1/4 of the world's people. The land area is approximately the size of the United States, the population over four times that of the United States. It is also three times what it was a century ago. There is immense variation in topography, climate, soils, ecology, and ethnic peoples. The altitude ranges from 300 meters below sea level (in the Turpan Depression of northern Xinjiang) to 8800 meters (in the Himalayas, the "roof of the world"); ecosystems range from tropic to alpine, rainfall varies from over 250 cm. annually to under 1 cm. China is unique in Eurasia in having an unbroken forest from the tropics to boreal regions. The flora is among the richest in the world, some 30,000 species (U.S. about 20,000) of seed plants, including 5,000 woody species, 2,800 tree species

(U.S. less than 700). Gymnosperms are especially well represented. One third of the world's pine trees grow in China.

Ginkgo (*Ginkgo biloba*) is a famous relict tree. 500 plant species are used in traditional medicine, with another 200 in herbal medicine. There are said to be 4,000 medicinal species.

China has 414 species of higher animals, of which 68 are under first-level national protection. There are 1,175 species of birds.

China has three of the longest rivers in the world, rivers that do not always flow peacefully, due to enormous catchment basins, often steep and barren, that shed water rapidly, and due to the erosion of loess soils that build up downstream deposits subject to periodic breakthrough and flooding. The Huang (Yellow) River ("China's Sorrow") has killed more people than any other feature of Earth's surface. In China, forestry is especially important in relation to soils and sedimentation and downstream water flow. Although the Chinese have lived more or less in harmony with their landscape for millennia, they today more nearly press the carrying capacity of their landscape than do most other peoples. Human development and environmental conservation are as integrally related in China as anywhere else on earth.

The immense Chinese population is very unevenly distributed on the landscape, due to the variation in climate and topographic features. In general China is about twice as elevated in landscapes as is the United States. Eastern China is densely populated, but the interior is often lightly populated and some parts are almost unpopulated. Some 90% of China's population live on little more than 15% of the land surface. The massive size of the population, together with the large and diverse land areas, pose problems of governability faced by no other country in the world. The climate is regarded as being more erratic and unpredictable than in most other nations.

China as a nation is not especially well-watered; the runoff is about one-fifth what it would be in other large nations. The actual water caught and used in the United States is about the same as the total amount of rain that falls on China, areas of comparable size. The result is a large population, unevenly distributed, an uneven rainfall, and strain on water resources.

The United Nations Environment Program reports that there are over 300 environmental awareness groups in China. There are also over 60 universities in China teaching courses on environmental engineering and ecology. A monthly English language journal, *China Environment News*, is published with UNEP assistance, together with a quarterly Chinese language journal, *World Environment*.

The Chinese do philosophy of nature, including environmental ethics, under the term "dialectics of nature," which for them also includes philosophy of science.

First All-China Conference on Environment and Development. This conference was held in Harbin, China, October 20-24, 1998. Harbin is in northeast China (once called Manchuria), the province of Heilongjiang. The city of Harbin has two million people, with wide, tree-lined avenues and European style architecture, comparatively, a legacy of the Russians, who once populated the city. The city fronts the south bank of the Songhua River. The Songhua flows on from Harbin to join the Heilongjiang (Black Dragon River), which gives the province its name.

The latter is a long river, originating in Siberia, which forms the boundary between China and Russia. The river is perhaps better known internationally by the Russian name, the Amur River.

The principal organizers of the conference were: Ye Ping, a philosopher at the Harbin Institute of Technology, where there is a Center for Environment and Development; Yu Mouchang, a philosopher at the Institute of Philosophy, Chinese Academy of Social Sciences, Beijing. The conference was held at the Harbin Institute of Technology. Also in Harbin is the Northeast Forestry University. In attendance were over 60 persons, from thirteen provinces.

The international speaker was Holmes Rolston, who was funded by a grant from the W. C. Wong Foundation, Hong Kong. Other papers were by Chinese academics and environmental professionals. For example, a paper by Zhou Ding, a woman in environmental chemistry (with experience in the U.S. with the EPA) on the general theme of how the curriculum in engineering needs to be reformed in the next century to feature sustainable development.

Another paper was by Zhao Jianjun, arguing that high tech civilization creates increasing entropy in the environment. Another was by Liu Bing introducing his Chinese audience to ecofeminism. Another paper was by Chen Minhao on the role of scientists in society.

Huanjing yu Shehui (Environment and Society) is a journal recently launched by the Harbin Institute Center for Environment and Development and the Institute of Philosophy, Chinese Academy of Social Sciences, Beijing. The first issue was out just in time for the conference, vol. 1, no. 1, October 1998. Sample articles: Yu Mouchang, "Trends in the Global Environment Calls for an Environmental Ethic"; Liu Guocheng, "Ecological Ethics Views in Ancient China"; Ye Ping, "Knowledge Economy and Sustainable Development"; and several articles responding to recent floods on the Neng and Songhua Rivers, August 1998. Also a translation Holmes Rolston, "Ziran zhong de jiashi shi zhuguande haishi keguande? (Are Values in Nature Subjective or Objective?)" and of John S. Dryzek, "Industrial Society and Beyond: Ecological Modernization" (from *The Politics of the Earth*). Another recent translation is Rolston, "Zun xun da zi ran (Following Nature)" in *Zhexue Yicong (Philosophy Translation Series)*, no. 4, 1998, pp. 36-42 (Chinese Academy of Social Sciences, Institute of Philosophy, Beijing), a translation of "Can and Ought We to Follow Nature?"

In China there are three places where there is some concentration in environmental philosophy: (1) Beijing, at the Institute of Philosophy, Chinese Academy of Social Sciences. The first doctoral dissertation in China studying Western environmental ethics has just been completed here: Yang Tongjin, *Xifang Huanjing Lunli Sixiang Hanjiu (The Ethical Foundation of Environmental Movements--A Study of Western Environmental Ethics (in Chinese))*, June 1998, The granting institution was the People's University of China, Beijing, and the advisor was Luo Guoje, Chair of the Chinese Society of Ethics (see entry in ISEE Bibliography section).

(2) Harbin, at the Center for Environment and Development, Harbin Institute of Technology, and to some extent at the Northeast Forestry University. Several faculty members are interested in the area, and there are graduate students writing M.A. degrees in environmental ethics.

(3) Inner Mongolia University, Huhohaote. A philosopher named Bao Qingde and two colleagues, are interested in (a) ecology and conservation of grasslands, (b) self-organization of nature, (c) theories in ecophilosophy.

At the Northeast Forestry University, there is an active ecology laboratory, the Open Research Laboratory of Forest Plant Ecology, with some advanced research, all the way from molecular biology to ecosystem assessment. There is also the only College of Wildlife Resources in China. Jia Jingbo, vice director, is also chief editor of Chinese Wildlife, most articles in Chinese, some in English.

On the last days of the conference, the entire group concluded the conference with a trip to the Liangshui (Cold Water) Nature Reserve (about a 12 hour bus ride away). In addition to the conservation area, there is an experiment station and experimental forest of the Northeastern Forestry University. There are also buildings for environmental education, student groups, and tourists. The staff includes 2 professors, 18 engineers, and many other professionals. This is the only place in China to see significant areas of undisturbed Korean pine forests. There are 30-40 Master's theses, and 1-2 Ph.D. theses done here each year.

The managers are trying to emphasize the scenery combined with a scientific appreciation of the preserved forests. This area, formerly subject to much timber exploitation, became a national level nature reserve in 1997, and, at the same time, became one of twelve reserves in China that is a Man and Nature Biosphere Reserve. The area has long winters, dry springs, and is difficult for agriculture. The forest of most interest is of mixed deciduous trees and Korean pine, a threatened species, found only in northeast Asia, China, Russia, and northern Korea. China had 60% of the pine, 30% was in Russia, and only 10% was in Korea, though it was named from there. Rare specimens of the tree, though no forests, have been found in Japan.

Nature reserves in China. There are 333 nature reserves in China (1986), and there were none in the 1950s. There is a goal of 500 reserves by the turn of the century. The present People's Republic was founded in 1949. The first nature conserve was in 1956; in 1966 there were nineteen. From 1966-1976 the "cultural revolution" damaged many of these reserves, some destroyed. From 1976 onward, there has been steady progress. In 1981 there were 76 reserves. Today there are 300+ national reserves, with a combined area of 19.33 million hectares. An English language account is: Li Wenhua and Zhao Xianying, China's Nature Reserves. Beijing: Foreign Languages Press, 1989. ISBN Hardcover 0-8351-2105-4 or 7-119-00495-6. Softcover: 0-8351-2108-9 or 7-119-00496-4.

Three significant areas of wildlands remain in China.

- (1) Daxinganling, the Major Xing'an Mountains, in northeast China. Largely forested.
- (2) Tibet, especially the river gorges, often little known.
- (3) Tibet - Sichuan Border, 8,500 km.² A very dry, uninhabited area, designated for conservation but there are only fifty security guards. The three areas combined form perhaps more than 2% of the total area of China. There are also wild areas in Inner Mongolia.

Jilin People's Publishing House (Jilin is a province in China) has published a series, the Green Classical Library, now 11 volumes, 8 American authors, including Thoreau, Walden; Carson,

Silent Spring; Leopold, Sand County Almanac; Commoner, Closing Circle; Meadows, Limits of Growth; Durning, How Much Is Enough?; Brundtland Report, Our Common Future. Holmes Rolston's Philosophy Gone Wild appears in this series, spring 1999, and forthcoming are Merchant, Death of Nature; Muir, Our National Parks; McKibben, End of Nature.

Most of northeastern China is the great Northeastern Plain, sometimes called the Manchurian Plain, the largest plain in China. It is suitable for mechanized farming, and huge areas are planted with wheat, corn, soy beans, rice, sugar beets, sunflowers. There are very few trees on this landscape that have not been planted, typically poplars in long rows along roads, or on either side of the train tracks. Also, there are not many fences on the landscape, no long running fences, though there are many wooden or stone fences adjacent to the houses. If cattle are out in the big fields, someone is watching them.

On this plain, there is also the largest oilfield in China.

There is also much wetland, vast marshes, and many areas that are subject to flooding, as happened last August. Near the city of Qiqihar, there is a wetland sanctuary for red-crowned cranes, the Zhalong Nature Reserve. A young girl here, working with the cranes, was trying to save an injured bird when she drowned. This was featured on national television in 1997, a moving story, with a song accompanying the film that became popular.

In the countryside, there are many slogans about family planning, and many slogans about land use. The Chinese estimate that their population policy results in 20 million fewer babies a year. Local governments can sell land for commercial use, although the national government dislikes this.

Another Nature Reserve is called Wudalianchi, or the Five Joined Lakes Nature Reserve, the site of fourteen volcanoes, with the last extensive eruption 1719-1721. Much of the country is too volcanic to farm (like the Craters of the Moon area in Idaho), but there are some extensively forested areas. The five lakes were formed by lava flow, which flooded a river in various places. In Jilin province, on the eastern side, the countryside becomes much more hilly, and there are considerable forests in the hills. This countryside becomes more picturesque, rolling topography, somewhat like the eastern U.S., though flat bottomed with rice fields. From the train, the rice stalks and corn stalks stacked in the fields, and the linear patterns of the rice fields catch the sun and shade nicely, and form quite aesthetically pleasant landscapes.

On the eastern side of Jilin province, bordering North Korea is the Changbai ("Ever-white") Mountain Nature Reserve, also a UN Man and Nature Biosphere Reserve, and one of the oldest of the Chinese nature reserves, preserved since the 1600's owing to some folk beliefs about ancestors of the Ching (Qing) dynasty and mountain gods here. Here there is a fairly intact comprehensive ecosystem, with primeval forests, notable for montane fauna and flora, including bear, boar, a native goat, and tiger, also the only alpine tundra in east China. The main summit here is 2,691 meters (8,929 ft.), alpine here with continuous forests to the sea. There are four Siberian tigers in the sanctuary. The area is famous for ginseng, which attracts tourists. There are also primeval groves of Korean pine.

Every city in China of any size has an active Environmental Protection Bureau, but is facing difficult problems. Ethics and the environment for most persons in China is about 90% a pollution issue. Nearly 18 years of fast-paced industrial growth in China has produced the predictable environmental consequences, with five of China's biggest cities now ranking in the world's top 10 cities for polluted air. China's Environmental News, a national environmental daily, published a seven-part series of articles recently examining the alarming state of pollution in the country and the consequences it has wrought on both urban and rural communities.

"At present, the residents in a large number of China's largest cities are living under long-term, harmful air-quality conditions," Mr Zhao Weijun, vice-director of the air pollution department of the National Environmental Protection Agency, told the paper. Exacerbating the problem, he said, is that most people in China are unaware of the slow and long-term effects that high levels of dust particles and toxic chemicals have on human health. Acid rain, which is said to fall over more than 40 per cent of the country, has come to be known as "an airborne god of death" because of the havoc which sulphur dioxide, a main by-product of the widespread use of coal as fuel in China, wreaks on agricultural lands.

In urban areas, out of every 100,000 people, an average of 35.6 die of lung cancer. The death rate due to respiratory diseases has seen a nearly 25% increase over the last 10 years. Air quality in Shenyang, Xian, Beijing, Shanghai and Guangzhou places them among the 10 most polluted cities in the world. According to a 1995 survey, the amount of dust in the air over China's northern cities surpassed World Health Organization standards by four to five times, while in southern Chinese cities, the amount is over three times the standard.

Car exhausts are also increasingly adding to China's air pollution woes. Despite low car-emission standards, only 61 per cent of the vehicles in Beijing met those standards last year. Worse, only 30 per cent of the capital's taxis made the grade, and few, if any, of the offending vehicles were removed from operation.

The Chinese government has attached much importance to cleaning up the environmental mess--but lacks funds. Also hampering efforts is the low-level of environmental awareness and inertia at huge loss-making, largely backward industrial state enterprises.

Station BTV, the main TV station in Beijing has an ongoing program called "Going with Nature," produced by a woman named Huo Xiu (who interviewed Holmes Rolston). For an earlier account of environmental ethics in China, see the ISEE Newsletter, vol. 2, # 4, Winter 1991 (available on website).

(Contributed by Holmes Rolston, III.)

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.

--Westra, Laura, and Werhane, Patricia, eds. *The Business of Consumption: Environmental Ethics and the Global Economy*. Lanham, MD: Rowman Littlefield, 1998.

--Thomas, Rosamund M., ed. *Teaching Ethics, Volume Three: Ethics and The Environment*. Cambridge, UK: Centre for Business and Public Sector Ethics, and London: HMSO (Her Majesty's Stationery Office) and Ethics International Press, Ltd. 1996. 805 pp. ISBN 0 11 7020591. Environmental ethics from a business and policy perspective. These articles are not written by professional philosophers, but by professionals in business and government concerned for environmental responsibility. A massive volume. Some of these papers resulted from conferences held at the Cambridge Centre for Business and Public Sector Ethics on the environment.

Contains the following:

--Slater, R.W., "Changing the Way We Govern--Sustainable Development in Canada," pages 1-30

--Osborn, F.A. (Derek), "Government Responsibility for the Environment: The United Kingdom Experience." pages 31-38

Gentry, Bradford S., "Differences in European and United States Approaches to Environmental Issues," pages 39-68

--Taylor, Derek, "Working with the Local Community to Produce a Local Agenda 21 Programme for a Sustainable Environment: The Lancashire Model," pages 69-94

--Thomas, Christopher, "A Systematic Approach to the Adoption of Environmentally Responsible Management," pages 97-111

--Stapleton, Julian, "The Environmental Imperative: An Industrial Perspective," pages 113-148

--Western, D.J., "Environmental Issues in Electricity Generation," pages 149-176

--Long, Roland, "The Ethics of Conservation: A Yorkshire Dales Perspective," pages 177-181

--Joy, David, "Quarrying in the Dales: Some Recent Developments," pages 183-189

--Jain, R.B., "The Bhopal Disaster Case," pages 191-237

--Carey, Bernard, "Environmental Ethics: A Framework for Analysis (With Special Reference to Environmental Audit)," 241-267. Includes a list of environmental legislation in New South Wales, Australia.

--Adams, Trevor, "Criminal and Civil Liability." 271-290

--Tuppen, Chris, "Communicating with Customers--Some Environmental Dilemmas," 293-311

--Frederickson, H. George, "Should There Be Social Equity Between Generations?" pages 313-326

--Thomas, Rosamund, "Nuclear Energy and Environmental Ethics," pages 327-347

--Osborn, F. A., "Environmental Policy Making--The Ethical Dimension," pages 357-394.

--"This Common Inheritance: Britain's Environmental Strategy: First Principles (United Kingdom White Paper 1990)", pages 393-431

--Royal Commission on Environmental Pollution (United Kingdom): Sixteenth Report: Freshwater Quality," pages 433-458

--Ishi, Hiroyuki, and Shimbun, Asabi, "Basic Environmental Attitudes in East and West--Why Do the Japanese Eat Whales?", pages 461-479

--"EC (European Communities) Eco-Management and Audit Scheme," pages 483-510

--Supreme Court of India, "Union Carbide Corporation v. Union of India," pages 513-618

--Macve, Richard and Carey, Anthony, "Corporate Environmental Disclosure: International Developments, Practice and Recent Recommendations," pages 621-638

--Russell, Colin A., "Troubled Waters: The Evolution Controversy," pages 641-669. Effect of evolution controversy on conservation of biodiversity

--Graham, Loren R., "Concerns about Science and Attempts too Regulate Inquiry," pages 671-696

--Berry, R. J. (Sam), "Environmental Knowledge, Attitudes and Action: A Code of Practice," pages 697-714

--Dwivedi, O. P., "An Ethical Approach to Environmental Protection: A Code of Conduct and Guiding Principles," pages 715-736

--Callicott, J. Baird, *Beyond the Land Ethic*. Albany, NY: SUNY Press, 1999. A sequel to *In Defense of the Land Ethic* (SUNY Press, 1989). This compilation collects many of the author's scattered journal articles and book chapters published in the intervening decade. An introduction locates environmental ethics in the wider discipline of philosophy and sets each item in the collection in its context. Contents:

1. Introduction: Compass Points in Environmental Philosophy

I. Practicing Environmental Ethics

2. Environmental Philosophy Is Environmental Activism: The Most Radical and Effective Kind

3. How Environmental Ethical Theory May Be Put Into Practice

4. Holistic Environmental Ethics and the Problem of Ecofascism

II. The Conceptual Foundations of the Land Ethic Revisited

5. Just the Facts, Ma'am

6. Can a Theory of Moral Sentiments Support a Genuinely Normative Environmental Ethic?

7. Do Deconstructive Ecology and Sociobiology Undermine the Leopold's Land Ethic?

III. Moral Monism vs. Moral Pluralism

8. The Case Against Moral Pluralism

9. Moral Monism in Environmental Ethics Defended

IV. Nature's Intrinsic Value

10. Genesis and John Muir

11. Rolston on Intrinsic Value

12. Intrinsic Value in Nature: A Metaethical Analysis

V. Ecological Metaphysics in Agriculture, Medicine, and Technology

13. The Metaphysical Transition in Farming: From the Newtonian-Mechanical to the Eltonian-Ecological

14. Environmental Wellness

15. After the Industrial Paradigm, What?

VI. Toward a New Philosophy of Conservation

16. Whither Conservation Ethics?

17. Aldo Leopold's Concept of Ecosystem Health

18. The Value of Ecosystem Health

19. Ecological Sustainability as a Conservation Concept

Callicott is in philosophy at the University of North Texas, and is president of ISEE.

--Golley, Frank, *A Primer for Environmental Literacy*. New Haven: Yale University Press, 1998. 254 pages. \$ 18.00 softback; 37.50 hardback. Presents the key concepts of the environmental sciences in an accessible style that can be understood by those who are not natural scientists. Unique in breadth and simplicity. Uses a top-down approach, beginning with the Earth and going

to the individual. Comments on the ethical, social and political implications of the concepts, presented in an implication section in each chapter, offering insight into the philosophy of the author. Tested in five classes on environmental concepts for the Environmental Ethics Certificate Program at the University of Georgia. Golley is Research Professor at the Institute of Ecology of the University of Georgia and is currently Chair of the Environmental Ethics Certificate Program.

--Buchanan, Patrick, *The Great Betrayal: How American Sovereignty and Social Justice Are Being Sacrificed to the Gods of the Global Economy*. Little, Brown. Reviewed by Cobb, John B., Jr., in "Against Free Trade: A Meeting of Opposites," *Christian Century* 115 (no. 29, October 28, 1998):999-1002. Cobb is against free trade because of what it does to third-world labor and the environment; Buchanan is against free trade because it undermines American justice and national sovereignty. But liberal and conservative meet surprisingly. "The real divisions of our time are not between left and right but between nations and the globalist delusion." "America's wealthiest 1 percent, which controlled 21 percent of America's wealth in 1949, now [1995] controls 40 percent. ... Top CEO salaries--44 times the average wage of a worker in 1965--have soared to 212 times." Is there a way to combine economic nationalism and a wider loyalty to Earth and all its people?

--Randolph, Richard O., Race, Margaret S., and McKay, Christopher P., "Reconsidering the Theological and Ethical Implications of Extraterrestrial Life," *CTNS (Center for Theology and the Natural Sciences) Bulletin* 17 (no. 3, Summer 1997):1-8. With some inquiries into environmental ethics on Mars. Ought it to be resuscitated and made habitable? Or is it more appropriate to let it remain lifeless. Can it have intrinsic worth if lifeless?

--Yang, Tongjin, *Xifang Huanjing Lunli Sixiang Hanjiu (The Ethical Foundation of Environmental Movements--A Study of Western Environmental Ethics (in Chinese))*. Ph.D. thesis at The People's University of China, Beijing, June 1998. The first doctoral dissertation in China studying Western environmental ethics. The advisor was Luo Guoje, Chair of the Chinese Society of Ethics. Developing an environmental ethics in China requires an analysis of Western environmental ethics. Surveys various types of environmental ethics with detailed analysis of anthropocentric ethics, animal welfare ethics, biocentrism, and ecocentrism. These schools differ in regard to who is morally considerable, a moral patient. Anthropocentrism is necessary but not sufficient. An authentic environmental ethics must embrace animal welfare, biocentrism, and ecocentrism. Confucian and Taoist virtue ethics can provide grounds for harmonizing these differing schools. Virtuous persons express concern for nonhumans as well as for humans. The differing schools become complementary, resulting in a comprehensive and inclusive ethic. Yang continues his research at the Institute of Philosophy, Chinese Academy of Social Sciences, Beijing. He is the translator for a Chinese edition of Holmes Rolston's *Environmental Ethics*, forthcoming June 1999.

--Rich, Bruce, *Mortgaging the Earth: The World Bank, Environmental Impoverishment, and the Crisis of Development*. Boston: Beacon Press, 1994.

--Steingraber, Sara, *Living Downstream: An Ecologist Looks at Cancer and the Environment*. Reading, MA: Addison-Wesley, 1997.

--Gadgil, Madheva, and Guha, Ramachandra, "Ecological Conflicts and the Environmental Movement in India," in Gahi, Dharam, ed., *Development and Environment: Sustaining People and Nature* (Blackwell: Oxford and Cambridge, 1994).

--Bengston, David N. and Xu, Zhi., *Changing National Forest Values: A Content Analysis*. USDA Forest Service General Technical Report NC-323, 1995. 29 pages. The authors identify four ways in which people value forests and forest ecosystems: (1) economic/utilitarian, (2) life support, (3) aesthetic, and (4) moral/spiritual. These values are either instrumental, where the good is equated with some desirable human end, or non-instrumental, the worth of something seen as an end in itself. It is important to separate values from objects-of-value. "Objects of value are the things that we care about or think are important, values are the ways in which we care about those things. Values are a conception of what is good about objects of value. Confusion between values and objects of value is common because the dividing line between these two concepts is subjective and dependent on how the terms are defined" (p. 6). Report produced at the U.S. Dept. of Agriculture, Forest Service, North Central Forest Experiment Station, 1992 Folwell Ave., St. Paul, MN 55108.

--Loomis, John, and Sorg, Cindy, *A Critical Summary of Empirical Estimates of the Values of Wildlife, Wilderness and General Recreation Related to National Forest Regions*. Fort Collins, CO: 1982. 140 pages. In Colorado State University Library.

--Forest Ecosystem Management Assessment Team, US Forest Service (FEMAT), *Forest Ecosystem Management: An Ecological, Economic, and Social Assessment*. Washington: U. S. Government Printing Office, 1993.

--Houlgate, Stephen, ed., *Hegel and the Philosophy of Nature*. Albany, NY: State University of New York Press, 1998. 354 pages. The contributors claim that, far from being surpassed by nineteenth and twentieth century scientific developments, Hegel's philosophy of nature continues to have great significance for our understanding of the natural world. Houlgate is in philosophy at the University of Warwick.

--World Conservation Monitoring Centre (WCMC), *The World List of Threatened Trees*. Cambridge, UK: World Conservation Press, 1998. ISBN 1 899628 10 X. This report finds that 10% of the world's 100,000 tree species are under threat, naming 976 species that are critically endangered and facing extinction, with many thousands of other species at threat. One such tree is frankincense. The report's grim bottom line is that habitat destruction threatens these trees and for three-quarters of them nothing is being done about it. Only 12% of tree species are in protected areas. Bird Life International published a similar report in 1994 and found that 11% were incidental. This report argues that the similar proportions are not incidental. A summary is Williams, Nigel, "Study Finds 10% of Tree Species Under Threat," *Science* 281(4 September 1998):1426.

--Kline, Benjamin, *First Along the River: A Brief History of the U. S. Environmental Movement*. San Francisco, CA: Acada Books, 1997. 176 pages. "The environmental movement is part of a long struggle to manage our natural resources more responsibly. What we decide to do about our environment today affects human existence forever, whether for good or bad. ... Despite many obstacles, the people of the United States have accepted the daunting challenge of dealing with environmental decay and, with the often contentious behavior of an open society, accomplished a great deal" (p. 139). Kline teaches history at San Jose State University, San Jose.

--Wootton, R. J., Kukalová-Peck, J., Newman, D. J. S., and Muzón, J., "Smart Engineering in the Mid-Carboniferous: How Well Could Paleozoic Dragonflies Fly?" *Science* 282(23 October 1998):749-751. "Insect wings ... are proving to be spectacular examples of microengineering. ... The dragonflies ... are supremely versatile, maneuverable fliers, and this is reflected in their wing morphology." A related story is Vogel, Gretchen, "Insect Wings Point to Early Sophistication," *Science* 282(23 October 1998):599-601. "The insects come equipped with highly engineered wings that automatically change their shape in response to airflow, putting the designers of the latest jet fighters to shame." Well, so much for blind, dumb, stupid evolution.

--Sen, Amartya, "What to Do About Famine." Interview in *Newsweek*, November 2, 1998. Sen just won the Nobel Prize in Economics. The Indian economist is widely regarded as the conscience of the profession, having devoted his career to "the downside of economics," while other economists analyze how to make a big profit. Sen analyzes the causes of famines and how to prevent them. "Famines have never occurred in democratic countries, even very poor ones, that have regular elections and a free media." Sen was long at Harvard but recently returned to become master of Trinity College at Cambridge, his alma mater.

--Kerr, Richard A., "Acid Rain Control: Success on the Cheap," *Science* 282(1998):1024-1027. The free-market approach has curbed acid rain beyond expectations and far cheaper than predicted. At many plants, sulphur dioxide emissions have already dropped beyond those required by law. The cost estimates are about \$ 1 billion a year, dramatically lower than earlier forecasts of \$ 10 billion. Multiple factors are involved, with economists still asking why, but one factor has been the flexibility in the emissions trading system (the so-called "rights to pollute"). A new round of reductions is forthcoming. Can anything like this work for reducing global carbon dioxide emissions?

--Sepänmaa, Yrjö, "Experiences of the Bog," *Form Function Finland* no. 70, 2/1998, pages 32-37. This journal is published by the Finnish Society of Crafts and Design/Design Forum Finland, Unionkatu 14, FIN-00130 Helsinki, Finland. E-mail: form.function@designforum.fi Aesthetic aspects of Finnish boglands. An article in connection with the Third International Conference on Landscape Aesthetics, Aesthetics of Bogs and Peatlands, held in Ilomantsi, Finland, June 1998.

--Gross, Michael, *Life on the Edge: Amazing Creatures Thriving in Extreme Environments*. Plenum, 1998. \$ 25.95. The extent to which living organisms, predominantly single-celled, are found thriving in situations so extreme as to have been assumed, until recently, to be unable to support life. Bears on the origin of life on Earth, also the possibility of extra-terrestrial life. Also the ingenuity of life on Earth.

--Volk, Tyler, *Gaia's Body: Toward a Physiology of Earth*. Springer-Verlag, 1998. \$ 27.00. Cycles, interactions in and between atmosphere, oceans, earth, and living organisms, in support of Lovelock's Gaia hypothesis.

--Tangley, Laura, "How Many Species Exist," *National Wildlife* 37 (no. 1, December/January 1999):32-33. The question takes on increasing significance as plants and animals vanish before scientists can identify them. 1.7 million have been named. 13,000 more are named each year. Most of the unnamed ones are invertebrates. There are fewer than 200 scientists in the world who can name tropical beetles, a group that may account for one-third of all the species on Earth. Scientists are so much in the dark that estimates of the unknown invertebrates vary widely, from 3 to 5 to 10 billion species.

--Butler, Victoria, "Unquiet on the Western Front: Controversy in Kenya," *International Wildlife* 28 (no. 6, Nov./Dec. 1998): 12-24. Controversy about conservation strategy and the extent to which it can and ought to include local peoples, in a land where the population has grown from 9 to 28 million in three decades, and encroachments on wildlife parks has reduced the wildlife by 44%, both by direct impact and by reduced buffer zones. The current head of the Kenya Wildlife Service is David Western, who favors more concessions to local people. Former head Richard Leakey takes a harder line and believes that the concessions will prove the park's undoing, as well as unraveling Kenya's tourism, vital in the Kenyan economy.

--Dailey, Gretchen and a dozen others, "Food Production, Population Growth, and the Environment," *Science* 281(28 August 1998):1291-1292. World population has increased at a historically high average rate of 1.8% annually since 1950, but cereal production has more than kept pace. Global statistics are misleading, however. One has to look at food production through a local lens. The increased production may not be sustainable, and the social costs of such production, counting hidden costs, often exceed the market prices. The purchasing power of the poor may be so weak that they are undernourished, even if there are ample supplies. More green accounting and genuine progress indicators are needed.

--Chazdon, Robin L., "Tropical Forests- Log'Em or Leave'Em?" *Science* 281(28 August 1998):1295-1296. Isolated forest fragments, logged forests, and second-growth forests are now being recognized for their value in the conservation of biodiversity, for example in forests of Borneo. But these results cannot be generalized to all forests, and other forests are unlikely ever to recover their original composition after logging. Chazdon is in ecology and evolutionary biology at the University of Connecticut, Storrs.

--Hammond, Allen, *Which World? Scenarios for the 21st Century*. Washington, DC: Island Press, 1998. There are three scenarios: (1) the market world: a new golden age of prosperity, (2) the fortress world of instability of violence, and (3) the transformed world: changing the human endeavor. Hammond favors the latter, where fundamental social and political changes give rise to enlightened policies and voluntary actions that direct and supplement market forces. This is already beginning as attested by the greening of global corporations, altered government policies, the rise of citizen groups, and a new age of philanthropy. This study is a joint venture of the Brookings Institution, the Santa Fe Institute, and the World Resources Institute. Hammond was formerly editor-in-chief of the annual *World Resources*.

--Laurance, William F., et al, "Biomass Collapse in Amazonian Forest Fragments," *Science* 278(7 November 1997):1117-1118. With commentary: Williams, Nigel, "Rain Forest Fragments Fare Poorly," *Science* 278(7 November, 1998):1016. In one of the longest studies, isolated fragments of rain forest suffer greatly around their edges, losing considerable amounts of biomass and species.

--Young, Oran R., ed. *Global Governance: Drawing Insights from the Environmental Experience*. Cambridge, MA: MIT Press, 1998. 344 pp. paper \$22.50, Cloth \$40. Contributors draw upon the experiences of environmental regimes to examine the problems of international governance in the absence of a world government.

--Victor, David G., Raustiiala, Kal, Skolnikoff, Eugene B., eds. *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice*. Cambridge, MA: MIT Press, 1998. 686 pp. Paper \$25, Cloth \$50. Contributors examine how international environmental agreements are put into practice. Their main concern is effectiveness--the degree to which such agreements lead to changes in behavior that help to solve environmental problems. Their focus is on implementation--the process that turns commitments into action.

--Creighton, Sarah Hammond. *Greening the Ivory Tower: Improving the Environmental Track Record of Universities, Colleges, and Other Institutions*. Cambridge, MA: MIT Press, 1998. 372 pp. Paper \$25. A motivational and how-to-guide for staff, faculty, and students. Offers detailed "greening" strategies for those who may have little experience with institutional change or with the latest environmentally friendly technologies. The author was project manager of Tufts CLEAN.

--Lerner, Steve. *Eco-Pioneers: Practical Visionaries Solving Today's Environmental Problems*. Cambridge, MA: MIT Press, 1997. 440 pp. \$25. Lerner provides case studies of eco-pioneers who are exploring sustainable ways to log forests, grow food, save plant species, run cattle, build houses, clean up cities, redesign rural communities, generate power, conserve water, protect rivers and wildlife, treat hazardous waste, reuse materials and reduce both waste and consumption.

--Keohane, Robert O., Levy, Marc A., eds. *Institutions for Environmental Aid: Pitfalls and Promise*. Cambridge, MA: MIT Press, 1996. 480 pp. \$23.50. Draws on research from economics, international relations, and development assistance, as well as the growing literature on international environmental relations, to evaluate the effectiveness of international institutions designed to facilitate the transfer of resources from richer to poorer countries, in conjunction with efforts to improve the natural environment.

--Cebon, Peter, Dahinden, Urs, Davies, Huw C., Imboden, Dieter, Jaeger, Carlo C., eds. *Views from the Alps: Regional Perspectives on Climate Change*. Cambridge, MA: MIT Press, 1998. 536 pp. \$60. This book takes a regional approach to the Alpine region. The result of the ongoing Swiss research program Climate and Environment in the Alpine Region (CLEAR), it incorporates the work of an independent network of approximately fifty researchers from a variety of disciplines.

--Pezzoli, Keith. *Human Settlements and Planning for Ecological Sustainability: The Case of Mexico City*. Cambridge, MA: MIT Press, 1998. 400 pp. \$40. The heart of the book is the story of what happened when residents of Los Belvederes, a group of Ajusco settlements, fought relocation by proposing that Los Belvederes be transformed into "Colonias Ecolthe bo Productivas", or productive ecology settlements. Through innovative organized resistance, their grassroots movement generated environmental and social action that eventually won crucial state support.

--Smith, Maureen. *The U.S. Paper Industry and Sustainable Production: An Argument for Restructuring*. Cambridge, MA: MIT Press, 1997. 300 pp. \$30. Smith outlines the basic structural characteristics of the U.S. pulp and paper industry and its relationship to the larger forest products sector, as well as its patterns of domestic and global fiber resource use. She reviews core technologies employed in virgin pulp production. She then reveals structural barriers within the industry that have impeded positive change and shows how these barriers are reinforced by the traditional isolation of environmental policy domains.

--Dauvergne, Peter. *Shadows in the Forest: Japan and the Politics of Timber in Southeast Asia*. Cambridge, MA: MIT Press, 1997. 336 pp. \$22. Although Japanese practices have improved somewhat since the early 1990's, Dauvergne maintains that corporate trade structures and purchasing patterns, timber prices, wasteful consumption, import tariffs, and the cumulative environment effects of past practices continue to undermine sustainable forest management in Southeast Asia.

--Nye, David E. *Consuming Power: A Social History of American Energies*. Cambridge, MA: MIT Press. 1997, 300 pp. \$25. Nye uses energy as a touchstone to examine the lives of ordinary people engaged in normal activities. He looks at how these activities changed as new energy systems were constructed, from colonial times to recent years. He shows how as Americans incorporated new machines and processes into their lives, they became ensnared in power systems that were not easily changed and resulted in a consumer culture.

--Arler, Finn, Svennevig, Ingeborg, eds. *Cross-Cultural Protection of Nature and the Environment*. Odense, Denmark: Odense University Press, 1997. 248 pp. Contents include the following:

--Norton, Bryan, "A Community-based Approach to Multi-generational Environmental Valuation," pp.17-28.

--Deshalit (de-Shalit), Avner, "Sustainability and the Liberal-communitarian Debate," pp. 29-41.

--O'Neill (O'Neill), John, "The Good Life Below the Snow-line: Pluralism, Community and Narrative," pp. 42-60.

--Agger, Peder, and Sandoe, Peter, "The Use of 'Red Lists' as an Indicator of Biodiversity," pp. 61-70.

--Milton, Kay, "Nature, Culture and Biodiversity," pp. 711-83.

--Sorensen, Merete, "Increase of Biodiversity Through Biotechnology: Genetic Pollution or Second Order Evolution," pp. 84-92.

--Anker, Helle Tegner, "Biodiversity and the Importance of the Legal Framework," 93-106.

--Richards, Paul, "Common Knowledge and Resource Conservation, Globally and Locally," pp. 107-118.

--Posey, Darrell, "Utilizing Amazonian Indigenous Knowledge in the Conservation of Biodiversity: Can Kayapo Management Strategies Be Equitably Utilized and Applied?" pp. 119-133.

--Foller, Maj-Lis, "Protecting Nature in Amazonia: Local Knowledge as a Counterpoint to Globalization," pp. 134-147.

--Svennevig, Ingeborg, "Local Peoples of the Western World: The Introduction of Local Cultures in the Wadden Sea Area," pp. 148-160.

--Pedersen, Poul, "Modernity, Nature and Ethics," pp. 161-175.

--Arler, Finn, "Global Partnership: A Matter of Friendship, Reciprocity or Mutual Advantage?" pp. 176-191.

--Jensen, Tim, "Religions and Conservation: A Survey," pp. 192-205.

--Kaarhus, Randi, "Policy Discourses on Environmental Problems in Ecuador and Norway: A Comparative Perspective," pp. 206-217.

--Lindegaard, Klaus, Segura, Olman, "Trade Offs in Joint Implementation Strategies: The Central American Forestry Case," pp. 218-231.

--Zeitler, Ulli, "Global Solutions and Local Understanding: Conceptual and Perceptual Obstacles to Global Ethics and International Environmental Law," pp. 232-244.

--Ghai, Dharam P., ed., *Development and Environment: Sustaining People and Nature*. Oxford and Cambridge: Blackwell Publishers, 1994. 263 pages.

Contents include the following:

--Hviding, Edvard, Baines, Graham, B.K. "Community-based Fisheries Management, Tradition and the Challenges of Development in Marovo, Solomon Islands," pp. 13-40.

--Amanor, Kojo, "Ecological Knowledge and the Regional Economy: Environmental Management in the Asewewa District of Ghana," pp. 41-68.

--Colchester, Marcus, "Sustaining the Forests: The Community-based Approach in South and South-East Asia," pp. 69-100.

--Gadgil, Madhav, Guha, Ramachandra, "Ecological Conflicts and the Environmental Movement in India," pp. 101-136.

--Joekes, Susan, Heyzer, Noeleen, Oniang'o, Ruth, Salles, Vania, "Gender, Environment and Population," pp. 137.

--Vivian, Jessica, "NGOs and Sustainable Development in Zimbabwe: No Magic Bullets," pp. 167-194.

--Ghimire, Krishna B. "Parks and People: Livelihood Issues in National Parks Management in Thailand and Madagascar," pp. 195-230.

--Utting, Peter, "Social and Political Dimensions of Environmental Protection in Central America," pp. 321-260.

--Cunningham, Andrew A., and Daszak, Peter, "Extinction of a Species of Land Snail Due to Infection with a Microsporidian Parasite," *Conservation Biology* 12(1998):1139-1141. The first documentation of an infection wiping out the last of a species. South Pacific snails are rare in nature. In the Society Island chain, 5,000 km. west of Hawaii, residents imported predatory snails from Florida to eat another imported snail that had become a pest. That was in 1986. But the new import preferred native snails. Scientists from the Zoological Society of London captured the last known individuals of *Partula turgida* to try to save them through a breeding program, in 1991. But, starting about 1994, the population dwindled from about 300 to 10.

Scientists became alarmed, but by the time they found out the trouble, it was too late. The snail became extinct. The cause was a new species of a microsporidian protozoan in the genus *Steinhausia* that had ravaged the snails digestive tracts. So endangered species recovery programs can be hazardous too. A summary story is Ferber, Dan, "Bug Vanquishes Species," *Science* 282(9 October 1998):215. Cunningham is at the Institute of Zoology, Regent's Park, London. Daszak is in the School of Life Sciences, Kingston University, Surrey, UK.

--Low, Nicholas, and Gleeson, Brendan, *Justice, Society and Nature: An Exploration of Political Ecology*. London: Routledge, 1998. 257 pages. Gleeson is at Australian National University, Canberra. Sample chapters: *Justice in and to the Environment*; *Environmental Justice: Distributing Environmental Quality*; *Ecological Justice: Rethinking the Biases*; *Justice and Nature: New Constitutions?*; *The Dialectic of Justice and Nature*. Low is in the Faculty of Architecture, Building and Planning at the University of Melbourne.

--Kemp, Elizabeth, ed., *Indigenous Peoples and Protected Areas*. London: Earthscan Publications, 1993. Includes Kemp, Elizabeth, "In Search of a Home: Living in or near Protected Areas."

--Goodin, Robert E., ed., *The Politics of the Environment*. Aldershot, Hants, UK; and, Brookfield, VT: Edward Elgar, 1994. 599 pages. Not cheap: \$ 140.00. Designed as a reference collection. Part I. *Environmental Ethics*, ten classical articles reprinted, from Passmore, Stone, Feinberg, Tribe, Sagoff, Hill, Elliot, Naess, Donald Regan, Plumwood. Part II. *Environmental Action*, 24 articles reprinted. The final article is: Goodin, Robert E., "International Ethics and the Environmental Crisis," reprinted from *Ethics and International Affairs*, 4(1990):91-105.

--Dryzek, John S., *The Politics of the Earth: Environmental Discourses*. Oxford, UK, and New York: Oxford University Press, 1997. 220 pages. An analysis of the main discourses that have dominated environmental affairs during the last three decades. Sample chapters: "Making Sense of Earth's Politics: A Discourse Approach"; "Leave It to the People: Democratic Pragmatism"; "Industrial Society and Beyond: Ecological Modernization"; "Save the World through New Consciousness: Green Romanticism"; "Save the World through New Politics: Green Rationalism": and Dryzek's conclusion: a reinvigorated "Ecological Democracy." Dryzek teaches political science at the University of Melbourne, Australia.

--Ridley, Matt, *Down to Earth: A Contrarian View of Environmental Problems*. London: Institute of Economic Affairs, 1995. 80 pages. Some claims:

1. World population growth is decelerating; food, oil and copper are all cheaper and more abundant than ever before.
2. Global temperatures may actually be falling, according to satellite sensors.
3. The ozone layer is getting thicker, not thinner, over temperate latitudes.
4. Winter sown corn, not pesticide use, is responsible for the decline of songbirds on farmland.
5. Some scientists say 20 per cent of species will be extinct in 30 years, yet the actual extinction rate of birds and mammals is 0.00008 per cent a year.
6. Big-game hunters are the best hope for the survival of Africa's wildlife outside a few well-financed national parks.
7. Environmental lobbying organisations are spending more money on lawyers and marketing

men to grow their own budgets and less on naturalists and volunteers.

8. Forty per cent of all trees in Britain belong to the government, whose record of mismanagement of forest ecology, public access and finance is second to none.

9. Government conservation schemes are too defensive; their some aim is to protect rich habitats rather than to improve impoverished ones.

10. Exaggeration, nationalisation and central planning are the enemies of the environment, not the allies." (See back cover.)

Ridley is a former zoologist at Oxford University, now a science writer, also a self-appointed iconoclast. A disciple of Richard Dawkins, he derives virtue from selfish genes in *The Origins of Virtue* (Penguin, 1997), from which he also derives free market environmentalism and Thatcherite politics.

--Davis, Mackenzie L., and Cornwell, David A., *Introduction to Environmental Engineering*. Boston: McGraw-Hill, 1998. 919 pages. A major introductory text to environmental engineering, with, early on, a small section on environmental ethics. "The birth of environmental ethics as a force is partly a result of concern for our own long-term survival, as well as our realization that humans are but one form of life, and that we share our earth with other forms of life. ... The acceptable system is one in which we learn to share our exhaustible resources--to regain a balance. This requires that we reduce our needs and that the materials we use must be replenishable. We must treat all of the earth as a sacred trust to be used so that its content is neither diminished nor permanently changed; we must release no substances that cannot be reincorporated without damage to the natural system. The recognition of the need for such adaptation (as a means of survival) has developed into what we now call the environmental ethic" (pp. 33-35). Davis teaches environmental engineering at Michigan State University; Cornwell is with Environmental Engineering and Technology, Inc.

--Lauerman, John F., "Animal Research," *Harvard Magazine* 101 (no. 1, 1999):48-57. Mice and medicine: The rights of humans and animals. A report from the laboratories and the animal-rights community. Some spokesmen: "You could also say that you couldn't have settled the South without slavery. Would you still do it that way today? Just because something seemed acceptable at the time is not to say that we should do it in our time" - Neal Barnard. "It is very easy to say that it is wrong to cause the death of another living animal. The difficulty comes in saying, 'I understand what I'm doing is causing the death of a limited number of animals. But I'm making a judgment that the results will justify doing the study.'" - Norman Letvin.

--Andrews, Richard N. L., *Managing the Environment, Managing Ourselves: A History of American Environmental Policy*. New Haven: Yale University Press, 1999. 419 pages. \$ 30.00 paper. American environmental policy is not just a product of late twentieth concerns, but is rooted in America's nearly four hundred year history of government actions to promote or control human uses of nature. The interplay between environmental policies and broader patterns of economic, social, and political development, showing how present environmental policy emerged from earlier patterns and precedents. Andrews teaches environmental policy at the University of North Carolina, Chapel Hill.

--Schmidt, Ralph, Berry, Joyce K., and Gordon, John C., eds., *Forests to Fight Poverty*. New Haven: Yale University Press, 1999. 200 pages. \$ 15.00 paper. The links between poverty and

deforestation, and between sustainable forestry and the reduction of poverty. Successes and failures in agroforestry, developing and maintaining national parks, interactions between forests, rural poor, land ownership, and property rights. Schmidt is director of the Program on Forests, Sustainable Energy and Environment Division, United Nations Development Program. Berry is in natural resources at Colorado State University. Gordon is in forestry and environmental studies, Yale University.

--Donahue, Brian, *Reclaiming the Commons: Community Farming and Forestry in a New England Town*. New Haven: Yale University Press, 1999. 288 pages. \$ 27.50. Donahue was a founder of Land's Sake, a community farm in Weston, Massachusetts, and teaches at Brandeis University.

--Koetsier, Peter, et al., "Rejecting Equilibrium Theory: A Cautionary Note," *Bulletin of the Ecological Society of America* 71(no. 4, December 1990):229-230. Equilibrium theory and non-equilibrium theory represent two ends of a spectrum with real ecosystems somewhere in between (Steward Pickett). Non-equilibrium theory is trendy, used to polarize ecologists, but may be no more true than equilibrium theory. Often whether one sees equilibrium or non-equilibrium depends on the level and scale of analysis. If density or community structure as a whole is studied, equilibria may appear never to be reached. However, at population levels, species diversity, or community composition, ecosystems may approach a predictable pattern or steady state. The four authors are in biological sciences at Idaho State University.

--Singer, Peter, ed., *A Companion to Ethics*. Oxford: Basil Blackwell, 1991. Contains two articles of relevance here:

--Elliot, Robert, "Environmental Ethics," pages 284-293.

--Gruen, Lori, "Animals," pages 343-353.

Both are short, introductory articles.

--Ross, Stephanie, *What Gardens Mean*. Chicago: University of Chicago Press, 1998. 272 pages. \$ 40.00. Ross ponders our capacity to relate to the natural world through the gardens we create. Garden and art history, philosophy, psychology, and literature, with particular attention to English gardens. "I propose to use this episode [the English garden] in the history of taste as a springboard for investigating important and enduring philosophical issues. ... What sorts of meanings can gardens possess? ... What philosophical and aesthetic theories supported eighteenth-century gardening practice? ... Why isn't gardening considered a full-fledged art today?" Among her other claims, "certain contemporary works of art--earthworks and environmental art--should be viewed as the descendants of the eighteenth-century landscape garden" (Preface). Ross is in philosophy at the University of Missouri, St. Louis.

--Bowker, John and Holm, Jean, eds., *Attitudes to Nature*. London: Pinter Publishers, New York: St. Martins, 1994. Also: New York: Cassell/Continuum. 192 pages. \$ 18.95.

--Hull, Fritz, ed, *Earth and Spirit: The Spiritual Dimension of the Environmental Crisis*. New York: Cassell/Continuum, 1993. 228 pages.

--Linzey, Andrew, and Cohn-Sherbok, Dan, *After Noah: Animals and the Liberation of Theology*. London: Mobray, 1997. Also: New York: Cassell/Continuum. 156 pages. Jewish and Christian traditions have often been blamed for justifying the abuse of animals. While some theologians have been negative about animals, there are ample resources within both traditions to support an enlightened and ethical view of animals. The way we treat animals is a benchmark for the kind of society we are; our attitudes toward animals can liberate theology from an obsessive and idolatrous humanism.

--Kwok, Pui-Lan, *Christology for an Ecological Age*. New York: Cassell/Continuum, 1999. 170 pages. \$ 20.00. Reinterpreting Christology from a postcolonial, multifaith, and ecofeminist perspective, the challenging issues are anthropocentrism, Christian imperialism, and the myth of Christian uniqueness. Pui-Lan offers a constructive presentation of three approaches for proclaiming Christ for an ecological age: organic models of Christ, Jesus as the wisdom of God, and Jesus as the epiphany of God. Kwok is a Chinese Christian.

--Young, Richard Alan, *Is God a Vegetarian?* Chicago: Open Court, 1999. 187 pages. \$ 20. Sorts through the Bible's many references to animals and diet in order to articulate a Christian account of food. Young's principle is a twist on Socrates: The unexamined meal is not worth eating. The Bible begins and ends with a noncarnivorous creation but in between God explicitly permits meat eating. Jesus eats fish and Paul seems to condemn vegetarianism (1 Timothy 4.13). A good case can be made, however, that vegetarianism is a valid and valuable way of anticipating the kingdom of God by practicing what God most intended for the world. Animal rights and Christian belief. Young teaches New Testament at Temple Baptist Seminary.

--Webb, Stephen H., *On God and Dogs: A Christian Theology of Compassion for Animals*. New York: Oxford University Press, 1998. 222 pages. Animal welfare and Christian conviction. The emotional bond with companion animals should play a central role in the way we think about animals in general. Against the more extreme animal liberationists--Webb defends the intermingling of the human and the animal worlds. He imagines what it would be like to treat animals as a gift from God; indeed, animals are not only a gift to us, but they give to us. We need to attend to their giving and return their gifts appropriately. Webb teaches religion at Wabash College.

--Kerr, Richard A, "Requiem for Life on Mars? Support for Microbes Fades," *Science* 282(1998):1398-1400. Few now think that the Martian meteorite from Antarctica contains any evidence of life on Mars, despite the startling announcement two years ago. NASA has spent \$2.3 million to decide not so. One main reason is that the alleged microbes are far too small to have ever been alive (See Vogel, Gretchen, "Finding Life's Limits," *Science* 282(1998):1399).

--Vogel, Gretchen, "Finding Life's Limits," *Science* 282(1998):1399. The smallest life can be is a more or less spherical cell about 200 nanometers in diameter, because anything smaller would not leave enough room for functioning amounts of DNA and some ribosomes. Anything smaller would involve a radically different kind of biology, so far unknown.

--McDonough, William, and Braungart, Michael, "The Next Industrial Revolution," *The Atlantic Monthly*, October 1998, pages 82-92. Since UNCED at Rio de Janeiro, the business buzzword

has been "eco-efficiency." "Eco-efficiency is an outwardly admirable and certainly well-intended concept, but, unfortunately, it is not a strategy for success over the long term, because it does not reach deep enough. It works within the same system that caused the problem in the first place, slowing it down with moral proscriptions and punitive demands. It presents little more than an illusion of change. Relying on eco-efficiency to save the environment will in fact achieve the opposite--it will let industry finish off everything quietly, persistently, and completely" (p. 83). The authors propose instead "eco-effectiveness." "Our concept of eco-effectiveness leads to human industry that is regenerative rather than depletive. It involves the design of things that celebrate interdependence with other living systems. From an industrial-design perspective, it means products that work within cradle-to-cradle life cycles rather than cradle-to-grave ones" (p. 88).

--Conn, P. Michael, and Parker, James, "Animal Rights: Reaching the Public," *Science* 282(20 November 1998):1417. The lead editorial in this issue of *Science*. "A misguided cause ... now seeks to end biomedical research because of the theory that animals have rights precluding their use in research. Scientists need to respond forcefully to animal rights advocates, whose arguments are confusing the public and thereby threatening advances in health knowledge and care. There is little logic in emotional campaigns to end the practice of animal experimentation. A 1990 study found that although 63% of animal rights literature concerns the use of animals in science, such use each year involves 0.003 percent of the number of animals consumed for food. Only half as many animals undergo medical procedures in research as endure surgery ordered by pet owners for cosmetic reasons..."

"Scientists must communicate their message to the public in a compassionate, understandable way--in human terms, not the language of molecular biology. We need to make clear the connection between animal research and a grandmother's hip replacement, a father's bypass operation, a baby's vaccination, and even a pet's shots. ... If good people do nothing, there is a real possibility that an uninformed citizenry will extinguish the precious embers of medical progress." Conn is in physiology and pharmacology at Oregon Health Sciences University, Portland. Parker is public information officer at the Oregon Regional Primate Research Center, Beaverton, OR.

--Frankel, Carl, *In Earth's Company: Business, Environment, and the Challenge of Sustainability*. Gabriola Island, BC: New Society Publishers, 1998 (P. O. Box 189, Gabriola Island, B.C V0R 1X0; phone 250/247-9737). 223 pages. \$ 16.95. In the series *Conscientious Commerce. Environmental policy. Sustainable Development*.

--Natrass, Brian, and Altomare, Mary, *The Natural Step for Business: Wealth, Ecology, and the Evolutionary Corporation*. Gabriola Island, BC: New Society Publishers, 1999 (P. O. Box 189, Gabriola Island, B.C V0R 1X0; phone 250/247-9737). 240 pages. \$ 16.95.

--Kemf, Elizabeth, ed., *Indigenous Peoples and Protected Areas: The Law of Mother Earth*. London: Earthscan Publications, 1993. 296 pages. Foreword by Sir Edmund Hillary. Sample articles: Kemf, Elizabeth, "In Search of a Home: People Living in or near Protected Areas"; Cordell, John, "Who Owns the Land? Indigenous Involvement in Australian Protected Areas"; Lewis, Connie, "Nature in the Crossfire"; Prokosch, Peter, "Siberia's Keepers of the Tundra"; Hackman, Arlin, "Inuit Create a Whale Sanctuary." "The remote areas of our world, with their

unique flora and fauna and their often remarkable indigenous peoples, must be protected. We cannot allow the voracious appetites of the increased world population to absorb and destroy them. Modern technology and finance can certainly be useful, but not at the expense of crushing a traditional culture or an exceptional natural environment. Often, over the centuries, these indigenous peoples have learned to handle their remote areas in a very efficient and inimitable fashion" (p. xii). Kemf is senior conservation editor with WWF International.

--Kung, Hans, *A Global Ethic for Global Politics and Economics*. New York: Oxford University Press, 1998. 336 pages. Arguing against both an amoral realpolitik and an immoral resurgence of laissez faire economics, Kung defines a comprehensive ethic founded on the bedrock of mutual respect and humane treatment of all beings that would encompass the ecological, legal, technological, and social patterns that are reshaping civilization. If we are going to have a global economy, a global technology, a global media, Kung argues we must also have a global ethic to which all nations, and peoples of the most varied backgrounds and beliefs, can commit themselves. Kung is a well known Roman Catholic theologian.

--Goodenough, Ursula, *The Sacred Depths of Nature*. New York: Oxford University Press, 1998. 160 pages. A modern understanding of biology can be reconciled with our timeless spiritual yearnings for reverence and continuity. Evolution, sexuality, emotions, death--these can be seen in ways that scientists and non-scientists alike come to appreciate that the origins of life and the universe are no less meaningful because of our increasingly scientific understanding of them. Goodenough is in biology at Washington University, St. Louis.

--Officer, Charles B., and Page, Jake, *Tales of the Earth: Paroxysms and Perturbations of the Blue Planet*. New York: Oxford University Press, 1993. 226 pages. The Earth-shattering events that have changed the course of history. The Tambora volcanic eruption of 1815 in Indonesia, which, a year later, caused snow to fall brown, blue, and red halfway around the world. The Lisbon earthquake of 1755, which sparked the famous clash between Voltaire and Rousseau over the meaning of disaster. The Earth is still hot and mobile, and its surface moves around. Flooding events. Visitors from outer space. On rare occasions there are big changes in Earth's community of living things.

The closing section are on the human capacity for wreaking equally great changes on a global scale. "The most fundamental question facing mankind today is whether man can evolve to live in harmony with nature" (Chapter 9) "Human beings, and, in particular, in the last couple of centuries of their existence, have brought about a new type of environmental stress. The most outstanding characteristic of this stress is the rapidity with which it has grown. Virtually nothing in the geological record can compare with these rapid changes: we are changing the Earth's environment far faster than natural forces have done in the past" (p. 205). "The time has come to recognize that the most pressing need is to learn to live in harmony with the planet and its resources, not simply to plunder and overrun it" (pp. 212). But too many still operate with an "ethics of ignorance" (p. 209).

--Eaton, Randall L., *The Sacred Hunt: Hunting as a Sacred Path*. Ashland, OR: Sacred Press, 1998. (Sacred Press, P. O. Box 490, Ashland, OR 97520). 206 pages. \$ 25.00. About forty short topical essays, forcefully written. Our human roots as hunters. The significance of hunting in being human and in understanding one's relation to the world. Samples: "The Human Carnivore,"

"The Deer I Never Killed," "Trophy Hunting and Planetary Dominion."

On Tom Regan: "Regan doesn't know where in 'the great chain of being' animal rights begin or end. ... Regan is a confused idealist whose animal rights would separate humanity from the animals and nature. There is nothing moral in his animal rights, no sacredness. Just more bombastic intellectualism, more hubris. I doubt that neither Tom Regan nor moral philosophy in general will lead us home. Moral philosophy is anachronistic, save the here-and-now listening to the heart. Let me tell you a secret from one of my students: 'Everybody is someone else's dinner.' ... Here is a simple truth. To live is to kill and to die. To live well is to kill and die well, to make sacred. Our first ethic for nature is to surrender our own hearts" (pp. 148-149). Well, too bad, Tom, but at least nature is still sacred--for these carnivorous hunters. Eaton is an animal behaviorist, long the editor of the journal *Carnivore*, and has appeared on national television in defense of hunting. There is also a set of two related videos: *The Sacred Hunt I and II*.

--Korten, David C., *When Corporations Rule the World*. West Hartford, CT: Kumarian Press, and San Francisco, CA: Berrett-Koehler Publishers, 1995 (a co-publication). 376 pages. "Each day half a million to a million people arise as dawn reaches their part of the world, turn on their computers, and leave the real world of people, things, and nature to immerse themselves in playing the world's most lucrative computer game: the money game." "It is played like a game. But the consequences are real... - a tale of money and how its evolution as an institution is transforming human societies in ways that no one intended toward ends that are inimical to the human interest. It is a tale of the pernicious side of the market's invisible hand, of the tendency of an unrestrained market to reorient itself away from the efficient production of wealth to the extraction and concentration of wealth ... The creation of money has been delinked from the creation of value." "So powerful has this force of money become that some observers now see the hot money set becoming a sort of shadow world government--one that is irretrievably eroding the concept of the sovereign powers of a nation state" (pp.185-187).

"This is a 'must read' book--a searing indictment of an unjust international economic order, not by a wild-eyed idealistic leftwinger, but by a sober scion of the establishment with impeccable credentials. It left me devastated but also very hopeful. Something can be done to create a more just economic order." -- Archbishop Desmond M. Tutu, Nobel Peace Laureate. "Korten is an honest witness to the disastrous betrayal of common people and future generations that is being carried out by corporations, governments, and multilateral banks. He cuts through the loud rhetoric of economic growth and global economic integration to the facts of increasing poverty, inequality, and dependence. I hope that this book is widely read." --Herman E. Daly.

Chapter 21 is "The Ecological Revolution," This revolution, Korten, maintains, "will require transforming the dominant belief systems, values, and institutions of our societies--an Ecological Revolution comparable to the Copernican Revolution that ushered in the scientific-industrial era" (p. 282). Korten was formerly a faculty member of the Harvard University Graduate School of Business, afterward with the Harvard Institute for International Development, afterward Asia regional advisor on development for the U.S. Agency for International Development (USAID).

--Willis, David J., "Ecophilosophy and Natural Law," *Journal of Energy, Natural Resources and Environmental Law* (University of Utah College of Law) 12(no. 2, 1996):419-451. "More effort is needed to construct and articulate a coherent ecophilosophy. ... It is particularly vital that attention be focused on the philosophical underpinnings of environmental policy. ... In a philosophical vacuum, we may do little to protect and preserve our conception of the good life"

(p. 419, p. 422).

"What we think about and wish for in environmental matters--what we value, both for ourselves and posterity--is the proper business of ecophilosophy and a timely subject for public debate. Natural law is a key element of this approach. ... Ecophilosophy offers such a theory based upon the Gaia hypothesis, a concept of the earth as a unified biological/geological entity greater than the sum of its parts" (p. 423, p. 424). Willis offers ten principles of natural law: Among them:

"1. The commonwealth of nature constitutes the greater society of which all living beings are members and have a rightful place" (p. 429).

"3. All forms of life have intrinsic as well as utilitarian value, adding to the diversity, health, and richness of the natural commonwealth" (p. 433).

"10. Enlightened self-awareness and action on the part of individuals acts cumulatively to encourage the maturing of human society and bring it into better harmony with the natural order" (p. 449).

Willis a lawyer in Houston, Texas.

--Ziman, John, "Why Must Scientists Become More Ethically Sensitive Than They Used To Be?" *Science* 282(4 December, 1998):1813-1814. Such increasing ethical sensitivity is "symptomatic of the transformation of science into a new type of social institution. As their products become more tightly woven into the social fabric, scientists are having to perform new roles in which ethical consideration can no longer be swept aside." In classical science, there could be academic disinterestedness, even ethical neutrality; but science today is increasingly integrated with the pursuit of human interests, often at the level of social forces in industry and finance. "Post-academic science has features that make nonsense of the traditional barriers between science and ethics." Science "cannot brush its ethical problems under the carpet. Science can no longer be 'in denial' of matters that many of us have long tried to bring to the fore." Ziman, from New Zealand, is in theoretical physics at the University of Bristol, UK, and was long chair of the UK Council for Science and Society.

--Carroll, John E., and Warner, Keith, eds., *Ecology and Religion: Scientists Speak*. Quincy, IL: Franciscan Press (Quincy University), 1998. 407 pages. \$ 22.00. Contributions by E. O. Wilson, Stephanie Kaza, Paula Gonzalez, Al Fritsch, Carl Jordan, Calvin DeWitt, and Elliott Norse. Experts in ecology, agricultural sciences, natural resource sciences, forest and marine conservation biology, entomology, environmental toxicology, forestry, geography. Christians, Jews, Buddhists, Baha'i, among others.

--Martell, Luke, *Ecology and Society: An Introduction*. Amherst: University of Massachusetts Press, 1994. Also: London: Polity Press, 1994. 230 pages. Chapters: Ecology and Industrialism; The Sustainable Society; Green Philosophy; The Green Movement; Ecology and Political Theory; Rethinking Relations between Society and Nature; The Future of Environmentalism. "I deal in particular with ... 'radical ecology' ... strands in environmental thinking which require ... fundamental changes in economic structure and value systems or either anthropocentric or ecocentric ethics. It is the most radical strands in which I am especially interested" (pp. 5-6). "Ecology, in short, revolutionizes thinking about the social and political world but also needs it. Both are important to change. An alliance of the green movement with social democratic and socialist movements, pushing for politically globally co-ordinated solutions, is the basis on

which such change can be achieved" (p. 199). Martell is a sociologist at the University of Sussex, UK.

--Coates, Peter A., *Nature: Western Attitudes Since Ancient Times*. Cambridge: Polity Press, 1998. 246 pages. Social aspects of nature. Philosophy of nature.

--Donner, Wendy, "The Self and Community in Environmental Ethics," pages 375-389 in Warren, Karen J., ed., *Ecofeminism: Women, Culture, Nature* (Bloomington, IN: Indiana University Press, 1997). "The critique of reason, rationality, and universal principles as male concepts is a familiar theme in many environmentalist, feminist, and ecofeminist writings. This critique rarely sorts out the forms of rationality and universalizability that are of legitimate concern for feminists and environmentalists from those that are valuable or essential to retain. ... It makes no more sense to condemn rationality in general because it has been ill used to attempt to justify domination and aggression than it makes sense to condemn emotion in general because hate and hatred have been the impetus for genocide and torture." Donner is in philosophy at Carleton University in Ottawa.

--Solomon, Steven, *The Confidence Game: How Unelected Central Bankers Are Governing the Changed World Economy*. New York: Simon and Schuster, 1995. 606 pages. From behind the walls of the U.S. Federal Reserve Bank, the German Bundesbank, the Bank of Japan, the Bank of England, and the enigmatic Bank for International Settlements in Switzerland, the world economy and politics have been transformed by the eruption of high-speed, volatile global money flows, a global monetary system that has often teetered on the brink of catastrophe. Solomon was formerly with *Forbes* magazine.

--Cooper, Gregory, "Generalizations in Ecology: A Philosophical Taxonomy," *Biology and Philosophy* 13(1998):555-586. There has been uncertainty and controversy over general knowledge in ecology. Perhaps only case by case knowledge is available, no genuine nomothetic knowledge. Philosophers of biology wonder if there are laws anywhere in biology. Cooper provides a framework for such general knowledge claims, with three broad categories--phenomenological, causal, and theoretical. While there are probably no laws as that term is generally understood in philosophy of science, it does not follow that everything in ecology is equally contingent. One can recognize degrees of contingency. This has implications for setting environmental policy based on ecological knowledge. Cooper is in philosophy at Duke University.

--Catalano, George D., "Chaos and a New Environmental Ethic: The Land Ethic Revisited," *Between the Species* 11 (Nos. 1 & 2, 1995):64-73. The revised ethic reads: "A thing is right when it tends to allow the natural world and all the entities thereof, to thrive in richness and diversity, and to experience change. It is wrong when it tends otherwise." Catalano is at the United States Military Academy, West Point.

--Foster, Leeann, "Wildlands and System Values: Our Legal Accountability to Wilderness," *Vermont Law Review* 22 (no. 4, summer 1998):917-951. "The paradox that is the modern American has given rise to the conflicting values that are embodied in wilderness law. Having outgrown, to a certain extent, notions that wild nature exists solely as something to be conquered,

we encouraged our leaders to preserve what we once freely enjoyed, because after having enjoyed so much of it, we were loath to watch it disappear. The Wilderness Act manifests this reluctance. ... What the Wilderness Act did not do, however, was to consider the systems-character of the wild lands it set aside. ... An ecosystems or transboundary approach to wilderness preservation through which systems accountability to wild lands is achieved will likely not pass quietly into law" (pp. 950-951). Foster is now practicing environmental law in New Jersey. She finished Vermont Law School in 1998 and in 1994 a M.A. in environmental philosophy at Colorado State University.

--Godoy, Ricardo, Franks, Jeffrey R. Claudio, Mario Alvarado. "Adoption of Modern Agricultural Technologies by Lowland Indigenous Groups in Bolivia: The Role of Households, Villages, Ethnicity, and Markets." *Human Ecology*, 26(no.3, 1998), p.351.

--Horowitz, Leah Sophie, "Integrating Indigenous Resource Management with Wildlife Conservation: A Case Study of Batang Ai National Park, Sarawak, Malaysia." *Human Ecology*, 26(no.3, 1998), p.371.

--Flanders, Nicholas E., "Native American Sovereignty and Natural Resource Management." *Human Ecology* 26(no.3, 1998), p.425.

--Keese, James R., "International NGOs and Land Use Change in a Southern Highland Region of Ecuador," *Human Ecology*, 26(no.3, 1998), p. 451.

--Herhahn, Cynthia L., Hill, J. Brett, "Modeling Agricultural Production Strategies in the Northern Rio Grande Valley, New Mexico," *Human Ecology* 26(no.3, 1998), p. 469.

--Sigman, Hilary, "Liability Funding and Superfund Clean-Up Remedies," *Journal of Environmental Economics and Management* 35(no.3, 1998), p. 205.

--Morey, Edward R., Waldman, Donald M., "Measurement Error in Recreation Demand Models: The Joint Estimation of Participation, Site Choice, and Site Characteristics," *Journal of Environmental Economics and Management* 35(no.3, 1998), 262.

--Heilbroner, Robert L., "The 'Disappearance' of Capitalism, *World Policy Journal* 15(no.2, 1998), p.1.

--Layne, Christopher, "Rethinking American Grand Strategy: Hegemony or Balance of Power in the Twenty-First Century," *World Policy Journal* 15(no.2, 1998), p.8.

--Barber, Benjamin R., "Democracy at Risk: American Culture in a Global Culture," *World Policy Journal* 15(no.2, 1998), p.29.

--Boyce, James K., Pastor Jr., Manuel, "Aid for Peace: Can International Financial Institutions Help Prevent Conflict," *World Policy Journal* 15(no.2, 1998), p. 42.

--Stone, Roger D., "The Denuded Earth: What Is to Be Done?" World Policy Journal 15(no.2, 1998), p. 50.

--Montgomery, John D., "The Next Thousand Years," World Policy Journal 15(no.2, 1998), 77.

--Smyth, Frank, "A New Game: The Clinton Administration on Africa, World Policy Journal 15(no.2, 1998), p.82.

--Chace, James, "The Time of the Primitives" World Policy Journal 15(no.2, 1998), p.99.

--Taylor, Estelle. "Native Trees," Alternatives 24(no.3, 1998):4. Court decisions recognize aboriginal title to Canadian forests.

EVENTS

1999

--March 18-21, 1999. Conference on "John Ray and His Successors: The Clergyman as Biologist." Braintree, Essex, UK. Bookings and details from Janet Turner, John Ray Trust, Town Hall Centre, BRAINTREE, Essex, CM7 3YG United Kingdom. Tel (+44) 1376-557776; Fax - 344345.

--March 19-20, 1999. Symposium on Genes and Development. Institut für Geschyichte und Ethik der Medizin, University of Basel, Switzerland. See "Conferences" above.

--March 31-April 3, 1999. American Philosophical Association: Pacific Division. Claremont Hotel, Berkeley, CA.

--April 19-22, 1999. In Situ and On-Site Bioremediation. The Fifth International Symposium. Sheraton Dan Diego Hotel and Marina, San Diego, California. Ralph Nader will give the keynote address. Contact: The Conference Group, Inc., 1989 West Fifth Avenue, Suite 5, Columbus, OH 43212-1912. Phone 800/783-6338. Fax: 614/488-5747.

--May 5-8, 1999. American Philosophical Association: Central Division. Hyatt Regency Hotel, New Orleans, LA.

--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. Contact: David N. Cole, Aldo Leopold Wilderness Research Institute, P. O. Box 8089, Missoula, MT, 59807; 406/542-4199; www.umt.edu/wildscience; or 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

--June 17-21, 1999. Society for Conservation Biology. Annual Meeting. University of Maryland, College Park (in Washington, DC, area).

--June 23-26, 1999. Fifth International Interdisciplinary Conference on the Environment, Baltimore, Maryland. Contact Demetri Kantarelis or Kevin L. Hickey, IEA/Kantarelis-Hickey, Assumption College, 500 Salisbury Street, Worcester, MA 01615. Phone: (508) 767-7557 (Kantarelis), (508) 767-7296 (Hickey). Fax: (508) 767-7382; E-mail: (Kantarelis) dkantar@assumption.edu or (Hickey) khickey@assumption.edu; Website: <http://champion.iupui.edu/~mreiter/iea.htm>

--June 27-29, 1999. The Society for Applied Philosophy. Annual Conference. In Conjunction with ISEE. Theme: "Moral and Political Reasoning in Environmental Practice." Mansfield College, Oxford University, UK.

--July 7-10, 1999. International Symposium on Society and Resource Management. University of Queensland, Brisbane, Australia. <http://www.geosp.uq.edu.au/issrm99>. Contact: Sally Brown, Conference Secretariat, The University of Queensland, 4072 Australia. 627/3365 6360 Fax: 617 3365 7099.

--July 9-11, 1999. Second International Conference of Art Culture Nature. University of Washington, Seattle. Papers invited. Includes papers and panels on ethical questions, human values, public policy, art as catalyst for social change. Contact: Andrew Hepburn, Conference Coordinator, Department of Communication Arts, Salisbury State University, 1101 Camben Avenue, Salisbury, MD 21801. 410/543-6233. Fax 4110/548-3002. E-mail: axhepburn@ssu.edu. Website: faculty.ssu.edu/~acn/

--August 20-21, 1999. Philosophy and Biodiversity, International Seminar at University of Turku, Finland. Worldwide attention to biodiversity seems to subscribe to the idea that we should do our best not to diminish the multiplicity of evolved life forms. The extinction of a kind for a Greek philosopher was something of an impossibility, but our perception of the natural world is quite different: the species are disappearing at a rate that exceeds the rate of evolutionary diversification. How exactly should we construct the idea of biodiversity? What are the basic units of biodiversity? Is there a correlation between diversity and stability? What is the significance of ancient philosophical ideas to modern philosophy of nature? Ethically, the preservation of biological diversity raises many questions that require different answers as compared to answers usually given in environmental ethics.

The seminar will consist both of plenary sessions with invited keynote speakers and of parallel sessions with paper presentations. Keynote speakers: Robin Attfield (University of Wales, Cardiff); Dieter Birnbacher (Universität Düsseldorf); Keekok Lee (University of Manchester); Bryan G. Norton (Georgia Institute of Technology); Kate Rawles (Lancaster University); Michael Ruse (University of Guelph). Proposals by April 30, 1999, to: Markku Oksanen, Department of Philosophy, University of Turku, 20014 TURKU, Finland. Phone: 358-2-333-6336. Fax: 358-2-333-6270. E-mail: majuok@utu.fi. Website: <http://www.utu.fi/yht/filosofia/biodiversity.html>

--September 23-26, 1999. Wilderness Horizons. Conference at the Sigurd Olson Institute of Northland College, Ashland, WI.

--October 8-10, 1999. Environmental Aesthetics, Utah State University, Logan, Utah. Featured speakers: Bruce Foltz (Eckerd College), Andrew Light (SUNY-Binghamton), Holmes Rolston,

III (Colorado State University). Call for papers: Professor Diane P. Michelfelder, Department of Languages and Philosophy, Utah State University, Logan, UT 84322-0720. Fax 435/797-1329. E-mail: dmichel@cc.usu.edu

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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 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.

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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 for teachers, administrators, students, prospective grad students, etc. Materials are submitted by the instructors. The site has many interactive links to environmental sites, home pages, universities, etc.

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