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*International Society for*  
**Environmental Ethics** *Volume 5, No. 4, Winter 1994*  
*Newsletter*

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## General Announcements

Pacific Division, American Philosophical Association, meets 29 March to 1 April in San Francisco, Myako Hotel. The ISEE Session includes: 1) Harold Glasser, University of California at Davis, "How 'Deep' Is Transpersonal Ecology," with commentary by Mark Michael, Institute for Ethics and Policy Studies, University of Nevada, Las Vegas; 2) William J. McKinney, Southeast Missouri State University, "Rolston and the Presumption of Guilt: Some Epistemic Problems in Environmental Ethics," with commentary by Robert Snyder, Humboldt State University; 3) Peter List, Oregon State University, "Environmental Scientists as Advocates for Nature: Some Medical Models," with commentary by Craig Walton, Institute for Ethics and Policy Studies, University of Nevada, Las Vegas; Moderator and Organizer, James Heffernan, College of the Pacific.

The Central Division of the APA meets 26-29 April 1995, Palmer House Hilton Hotel, Chicago, IL. ISEE sessions are: Thursday, April 27, 7:30-10:00 (Wabash Parlour), L. Westra, Chair, on the topic: "Environmental Ethics in Europe," with papers by Jan Wawrzyniak, "The Social Self-Delusion of Utilitarian Philosophy of Environmental Policy," Konrad Ott, University of Tubingen, Germany, "Can One Coherently Argue Both in Support of Discourse Ethics and Deep Ecology?" and Adrian Miriou, Romania. Friday, April 28 (Private Dining Room #6), Panel Discussion on "Environmental Racism," James Sterba, Chair; speakers: Robert Bullard, Clarke University, "Justice in Environmental Decision-Making," Bill Lawson, University of Delaware, "Environmental Justice in the Urban Setting," Laura Westra, University of Windsor, "Titusville, AL and BFI: A Case Study," Peter Wenz, Sangamon State University, "Just Garbage."

In general, the annual deadlines for paper submissions for the ISEE sessions regularly held at the three divisional American Philosophical Association meetings are: Eastern Division, March 1 (The time is now!)

Central Division, proposals by October 15, papers by January 1

Pacific Division, proposals by October 15, papers by January 1

--Submit Eastern Division proposals to Professor Eric Katz, Department of Humanities, New Jersey Institute of Technology, Newark, NJ 07102.

--Submit Central Division proposals to Professor Laura Westra, Department of Philosophy, University of Windsor, Windsor, Ontario N9B 3P4.

--Submit Pacific division proposals to Professor James Heffernan, Department of Philosophy, University of the Pacific, 3601 Pacific Avenue, Stockton, CA 95211.

The Westminster Institute for Ethics and Human Values is sponsoring a conference, "Surviving Globalization: Economic, Social and Environmental Dimensions," London, Ontario, 25-27 May 25-27 1995. Proposals for papers are invited, with a special interest in the economic and environmental dimensions of globalization, especially concrete policy implications. Contact: Ted Schrecker, Associate Director, Westminster Institute for Ethics and Human Values, 361 Windermere Road London, Ontario N6G 2K3 Canada. Phone (519) 673-0046; FAX (519) 673-5016; E-mail <schrecker@sscl.uwo.ca>

Canadian Case Studies on Sustainability and Distributive Justice. Ted Schrecker (see above) is putting together a book of Canadian case studies based on a symposium held earlier by the Canadian Society for the Study of Practical Ethics. Broadview Press has expressed considerable interest. Chapters tentatively committed are: Ted Schrecker (Westminster Institute), "Winners, Losers, and Environmental Sustainability: An Analytical Framework"; Roger Krohn (Sociology, McGill University), "Toward a New Environmental Politics: The Example of James Bay I vs. II"; Wes Cragg, David Pearson and Mark Swartz (Administrative Studies, York University), "Sustainability and Historical Injustice: Lessons from the Moose River Basin"; Donald Abelson (Political Science, University of Western Ontario), "Political Agendas in Policy Communities: Environmental Groups, the Ontario Government, and the Debate over NAFTA"; Mary Richardson (Philosophy, Athabasca University), "Public Participation in Development Decisions: A Case Study of Public Hearings on a Pulp Mill in Athabasca, Alberta"; Chris Tollefson (Faculty of Law, University of Victoria), "Strategic Lawsuits Against Public Participation: Developing a Canadian Response"; John McMurtry (Philosophy, University of Guelph), "CIDA-University Aid to Human Rights Violators: The Case of the University of Guelph and the Government of Indonesia." More case studies are invited. Some possibilities: Decision-making on the Kemano II project in British Columbia; a case study from the Atlantic provinces. Contact: Ted Schrecker (address above).

The Society for Conservation Biology will meet 7-11 June 1995 at Colorado State University, Fort Collins. SCB is the largest organization of research conservation biologists and environmentalists in the world (over 5,000 members). Virtually all of these scientists are convinced that ethics and advocacy are central to what they do, and they openly welcome and encourage help from philosophers and ethicists. The SCB program deadline will be March 1995, and papers or well-formulated abstracts will be needed by then.

ISEE will sponsor one or more sessions. If interested in reading a paper or organizing a panel or session, get in touch with one of ISEE's contact persons for SCB: Jack Weir, UPO 662, Morehead, KY 40351 USA, phone: 606-784- 0046, E-mail: <j.weir@msuacad.morehead-st.edu>; or Phil Pister, Desert Fishes Council, P. O. Box 337, Bishop, CA 93514, phone: 619-872-8751. Information is also available from the meeting organizer: Richard L. Knight, Department of Fishery and Wildlife Biology, Colorado State University, Fort Collins, CO 80523

USA.

The Australian Association of Philosophy (Australian Division) will hold its annual conference 2-7 July at the University of New England, Armidale, NSW. Papers are invited and should be sent to Dr. F. D'Agostino, Department of Philosophy, University of New England, NSW, 2351, Australia, by March 1, 1995. FAX: 61 (country code) 67 733317. E-mail: <lportell@metz.une.edu.au>

Abstracts are due two months later.

The Canadian Society for the Study of European Ideas/Societe canadienne pour l'etude des idees europeenes (CSSEI/SCEIE) invites submissions of papers for its conference 2-3 June 1995 at the Universite de Quebec a Montreal. The meeting is again in conjunction with the Learned Societies Conference. Expressions of interest in participation and 150-word abstracts should be sent by February 1st; papers, 20 minutes or about 10 pages, should be sent by April 1st. For more information or to submit materials, contact: Prof. Thomas Heyd, Dept. of Philosophy, University of Victoria, Victoria, B.C., V8W 3P4, Canada; or Prof. Andrew Light, Department of Philosophy, University of Alberta, Edmonton, Alberta, T6G 2E5, Canada.

The Society for Philosophy and Geography is also meeting at the Canadian Learned Societies Meetings, Montreal, Quebec, 2-3 June 1995, and invites papers for a session on "Ideas of Nature and Land." Abstracts by February 1; papers by April 1. Another session will be on "Constructed Space: Impacts on European and Non-European Ideas." Contact Thomas Heyd or Andrew Light (addresses above).

A new journal is being started, Terra Nova, to be published quarterly by MIT Press starting in January 1996. The subtitle is "Journal of Nature and Culture," and the editor is looking for interdisciplinary, accessible, but penetrating analysis of all issues on the human-nature connection. Pieces should not be addressed only to other philosophers, but to a general educated readership. Footnotes and citations should be kept to a minimum, and original but informed work is preferred to reviews of existing literature. This is an excellent publication opportunity: a refereed journal, published by a reputable press committed to quality production and worldwide distribution, and it is starting from scratch. Send any submission on hardcopy and disk. For further details or to submit abstracts, contact: David Rothenberg Dept of Social Science and Policy Studies, NJIT, Newark, NJ 07102, tel. (201)596-3289, FAX (201)565-0586, Email <rothenberg@admin.njit.edu>

La Revista Iztapalapa, published in Mexico City, plans a special issue on "The Gaia Hypothesis: The Controversy Continues" (Gaia: la Tierra Viva :la controversia continua) and calls for papers on various aspects, philosophical, ethical and biological, of GAIA. Send papers in Spanish or in English to the guest editor, Teresa Kwiatkowska, Universidad Autonoma Metropolitana-Iztapalapa, Departamento de Filosofia, Av. Michoacan y Purisima, Mexico, 09340 DF, Mexico by April 30 1995. E-mail: <kwiat@xanum.uam.mx>

J. Baird Callicott is Visiting Professor at Presbyterian College, Clinton, South Carolina, spring 1995. The college has received a three-year applied ethics Knight-Ridder grant (one year each:

biomedical, business, and environmental ethics). Douglas J. Buege is replacing Callicott at the University of Wisconsin-Stevens Point for this term. Callicott was in Germany to lecture twice last fall, at "Fakten Wege Visionen/Future Works," an event with multiple sponsors including the World Wide Fund for Nature and Texas Instruments. He spoke on "The Conceptual Foundations of the Land Ethic." Other speakers included Peter Berg (Planet Drum Foundation, San Francisco) on "Bioregionalism and Green Cities," and Murray Gell-Mann, Nobel laureate and discoverer of the quark, "The Quark and the Jaguar: A Scientific Approach to Solving the Problems of the 21st Century," an account of nature's evolution from the simple (quarks) to the complex (of which the jaguar is a symbol), and a vision how humans can find solutions for the environmental problems faced in the next century.

t the North American Interdisciplinary Wilderness Conference, November 10- 12, 1994 at Weber State University: Jim Hill (Valdosta State University, "The Intrinsic Value of the Iowa Prairie: J. Baird Callicott versus Lilly- Marlene Russow"; Wayne Ouderkirk (Empire State University, New York), "The Very Idea of Wilderness"; Douglas Buege (University of Cincinnati), "Peoples and Parks: Some Considerations of the Relationship of Humans to Wilderness"; Kevin Hiers (University of the South), "Reinventing Nature: An Ethical Critique of Restoration Ecology"; Sean O'Grady (Boise State University), "Initializing Idaho"; David Robertson (University of California-Davis), "The Mesa Trail"; David Rothenberg (New Jersey Institute of Technology), "Contact! Contact! Up Katahdin with Thoreau"; Felicia F. Campbell (University of Nevada-Las Vegas), "Wilderness Companions"; Randal Gloege (Montana State University), "Losing Track of Place and History"; Ari Santas (Valdosta State University), "The Environmental Value in G. H. Mead's Cosmology"; and Marvin Henberg (Linfield College), "Nature as Metaphor." Keynote speakers were Max Oelschlaeger, "Reflections on the Wilderness Act" and Paul Slovic on fundamental psychological difficulties with contingency valuation in environmental policy. This is an annual conference. Contact Mikel Vause, English Department, Weber State University, Ogden, UT 84408- 1201. (Thanks to Doug Buege.)

International Conference on Northern Wilderness Areas, "Ecology, Sustainability, and Values," was held at Rovaniemi, Finland, 7-9 December 1994. Sample papers of philosophical interest, these in English: Juha Pentik-Ninen, (University of Helsinki, Department of Theology), "Values of the Northern Man"; L. MÅller (Arctic Centre, University of Lapland), "Is There Wilderness in the North? Reflections on definition, Perception and Practices"; Leena Vilkkka (Philosophy, University of Helsinki), "Should We Preserve Intrinsic Values in Wilderness?"; A. Ewert (University of British Columbia), "Changing Wilderness Values as a Function of Urbanization"; T. Kurttila (University of Manchester), "Definition of Wilderness"; John Hendee (University of Idaho, Wilderness Research Center), "International Principles for Wilderness Management.

Tampere University of Technology, Tampere, Finland, held a conference, "Are Local Strategies Possible?", 22-25 September 1994, with various papers about local planning for sustainability and environmental planning. One of philosophical interest: Leena Vilkkka, "The Conception of Sustainable Development from an Environmental Point of View."

The Institute of Ecology, Justice and Faith is announced, with such patrons as Wendall Barry, Fritjof Capra, James Lovelock and the Dalai Lama. Schumacher College, The Old Postern, Dartington, Devon TQ9 6EA, U.K.: Fax (0803 866899). The Institute runs such courses as

"Politics of Change," "Ecological Economics," and is actively seeking students and participants.

Prospectus available from L. Westra, address below.

Avner de-Shalit, Department of Political Science, Hebrew University, Jerusalem, has been promoted to senior lecturer, with tenure. He is the author of *Why Posterity Matters* (Routledge, 1994, in the series *Environmental Philosophies*, edited by Andrew Brennan), a comprehensive examination of duties to future generations. He argues for a new communitarian theory of intergenerational justice, which can serve as the moral basis for environmental policy. de-Shalit teaches environmental ethics and political policy at the Hebrew University.

*Res Publica*, a new journal of legal and social philosophy is interested in articles in the fields of environmental philosophy and environmental law. For more information contact the editor, Dr. Bob Brecher, School of Historical and Critical Studies, University of Brighton, Brighton BN2 1RA, U.K. You can also contact Dr. Avner de-Shalit, Department of Political Science, The Hebrew University, Jerusalem 91905, Israel. FAX 972-2-322545.

The Department of Philosophy at the University of Oslo had a fall seminar series, "Global Ethics and Sustainability," chaired by Jon Wetlesen. Among the contributors: Michael Watts (University of California), "Berkeley on "Right, Morality and Entitlement: Thinking about Famine and Food Provision" and Thomas Pogge (Columbia University) assessing Rawls' contribution to International Ethics. Also, as a guest of the Seminar for Science Studies, Andrew Brennan (University of Western Australia) spoke on economics and ecology.

Journal contents by e-mail: UnCover Reveal service will send you, at no charge, a listing of the table of contents of incoming issues of whatever journals you wish (of the 16,000 journals they index!), including environmental journals, including such journals as *Environmental Ethics*, *Environmental Values*, *Journal of Agricultural and Environmental Ethics*, *Conservation Biology*, *Environmental Politics*, *The Environmental Professional*, *Ecology Law Quarterly*, *The Ecologist*, *Boston College Environmental Affairs Law Review*, *Environmental Law*, *Human Ecology*, *Human Ecology Forum*, *Hastings Center Report*, *Society and Natural Resources*, *Journal of Environment and Development*, and others. Your college or university library needs to be on the CARL Corp. system, as several thousand are, though some libraries not on CARL also get UnCover. In UnCover's Reveal service, you fill out a profile, and whenever a new issue is indexed, you get an e-mail listing the contents of the new issue. The whole articles are available for purchase and can be quickly sent by fax, if you wish (not by e-mail). But the contents listings are free. Check with your librarian.

New Publication in October 1994: a newspaper, *Environmental Times*, published by the Environmental Assessment Association, 8383 East Evans Rd., Scottsdale AZ 85260-3641; Fax (602) 998-8022. Topics in a sample issue include "Why Is There a Need for Environmental Inspectors?" "Radon Awareness," "Watch Out for Lead-paint Poisoning," "Oregon and Asbestos," and what makes a green building. It looks and reads like a newspaper, not a journal, and one cannot expect philosophical discussion, but simply a presentation of various issues. It's subtitled "The Voice of the Industry."

Environmental Field Studies Abroad: The School for Field Studies offers semester and summer environmental field research programs around the world. All courses carry college credit through Boston University; tuitions range from \$ 2,600 to \$ 10,300; considerable scholarship help is available. Over 6,000 students have participated in the program, from 150 home institutions. Five major centers are involved, in Australia (rainforests), Mexico (marine mammals), Costa Rica (sustainable development), Kenya (wildlife management), Turks and Caicos Islands (marine conservation), and Palau, U.S. Trust Territories (islands). Headquarters: 16 Broadway, Beverly, MA 01915-4436. Phone 508/927-7777. Fax 508/927-5127.

Wilderness debate at Georgia: ISEE Vice-President Baird Callicott debated ISEE President Mark Sagoff on wilderness at the University of Georgia, November 3, 1994, in a session moderated by Frank Golley. Callicott argued that wilderness conservation for psychosocial experience is too limited. Encouraging such concepts causes us to designate wilderness areas only in remote and desolate areas of ice and rock. The wilderness concept is further limited because it is artificially created by humans, but in actuality the wild systems are very dynamic and would not remain the same without management. Darwin showed that humans are part of nature, but such a revelation does not give humans license to act in any way they want and call it "natural." We need an alternative to nature worship; we need to preserve wilderness not only for its scenic qualities but also for its biodiversity and try to integrate bio-conservation with economic incentives. Sagoff stressed that wilderness should provide a spiritual escape because its greatest power is as a symbol of God that teaches awe and wonder for nature. Nature is a refuge from city life where we find meaning, and to find such meaning we must have respect for nature that goes beyond prudential concerns for our own well-being. If we rediscover nature's meaning rather than trying to determine its uses we will obtain a sense of permanence, meaning, and culture in our own lives. However, the perfect wilderness idea is played out because wilderness is already lost and the idea that we can designate a perfect wilderness area is a myth, "perfection is always going to be fictional," a fact that we need to accept and accommodate in our expectations of wilderness conservation. Other participants were Frederick FerrÇ, Judy Meyer, and Eugene Odum.

Science, Values, and the Global Environment, Also at Georgia: In another presentation, on 1 November 1994, Dale Jamieson noted the globalization of environmental problems and the costs of relying on science and the authority of scientists to find solutions. (1) New technology to collect, store, and process data and predict the future is heavily relied on, which encourages the idea that science can solve the problem. (2) The 1992 Rio Summit demonstrated the necessity of a rise in global public concern about climate, ozone, and biodiversity, if anything ever is to be done. (3) Political and social changes such as the end of the Cold War have provided new purposes for high tech military programs. (4) The global metaphor gains strength when we can envision our connectedness through the image of space photos. Drawbacks are that science is elitist, because only a trained few can come up with solutions; most people are disempowered because they lack scientific resources and understanding. Science demotes folk knowledge because all natural cures must be validated by science. Science believes it has a right to judge other cultures. Science also often fails to obtain quick solutions because of a lack of consensus among scientists.

Aldo Leopold at Wisconsin: "Aldo Leopold: His Land Ethic and Influence in Germany and the

U.S." was the theme of an international symposium, October 26-30, 1994, sponsored at the University of Wisconsin-Madison by the Max Kade Institute for German-American Studies. The keynote address was by Senator Gaylord Nelson; other participants were Susan Flader (History, University of Missouri-Columbia), Curt Meine (International Crane Foundation), Bill Jordan (Restoration Management, UW-Madison), Gerhard Trommer (Biology, University of Frankfurt), Peter Morris-Keitel (German, Bucknell University), William Rollins (German, University of Kentucky- Lexington), Thomas Dunlap (History, Texas A and M), Nina Leopold Bradley, Richard Barrows (Agricultural Economics, UW-Madison), Jeff Gersch (Environmental Strategies, Denver), Eugene Hargrove (Philosophy, University of North Texas), Wilfried Feldenkirchen (Business History, University of Erlangen), Greg Armstrong (UW Arboretum), Scott Schroder, Landmarks Gallery, Milwaukee), J. Baird Callicott (Philosophy, UW-Stevens Point), Arthur McEvoy (History and Law, UW-Madison), Walter Kuhlman, Environmental Law, Madison), Donald Waller (Botany, UW-Madison), Kevin McSweeney (Soil Science and Environmental Studies, UW-Madison), Harvey Jacobs (Environmental Studies and Urban and Regional Planning, UW-Madison), and Chris Wold (Center for International Environmental Law, Washington). (Thanks to Eugene Hargrove.)

Laura Westra is soliciting papers for a forthcoming volume on "Ancient Greek Thought and the Environment." The volume is planned to incorporate a number of papers on concepts, arguments or specific thinkers, any of which might suggest possible "roots" of ecology, biology or environmental ethics, from the Presocratics to Plotinus. This volume is intended to investigate the truth of claims about the alleged conflict between Ancient Greek Thought and Environmentalism. The same theme will form a panel at the next conference on Ancient and Medieval Philosophy and Modern Social Thought, Oct. 20-22, 1995, at Binghamton University, NY. Submissions of abstracts and proposals will be considered for both the book and conference, and can be made to Laura Westra (University of Windsor) before 1 Feb. 1995.

Andrew Brennan has been awarded a research award of Aus\$40,000 by the Australian Research Council to give him significant relief from teaching over the next two years to concentrate on a project on the foundations of environmental philosophy. The aim of the project is to describe in detail the structure of an environmental philosophy and to compare a number of environmental philosophies including eco-feminism, deep ecology and economics-based philosophies. According to Brennan, an environmental philosophy has four structural features: i) a theory about nature and the objects and processes it contains; ii) a theory of human beings providing a general perspective on the context in which life is lived and the problems it faces; iii) a theory of value grounded in (i) and (ii) above; iv) a theory of method indicating the standards by which claims made within the overall theory are to be tested, confirmed or rejected. Economics-based theories are often hampered, he argues, by a commitment to a strongly positivistic theory of method. Once this is given up, there is scope for some rapprochement between economic philosophies and the other philosophies he considers. Brennan also intends to argue that no single environmental philosophy, in the sense described above, provides a privileged perspective on humans and their environmental problems. However, since pluralism is generally much misunderstood, he wants to develop an account of pluralism that is neither morally nor metaphysically implausible. He would be pleased to make contact with others working on similar projects. Email <[abrennan@uniwa.uwa.edu.au](mailto:abrennan@uniwa.uwa.edu.au)>

SEE is meeting in conjunction with the Institute for Biological Science at San Diego, CA, 5-8 Aug. 1995. Laura Westra has been asked to coordinate a session, and papers/abstracts/proposals are urgently solicited. Please FAX Westra (519) 973-7050, since the information is needed immediately.

Dr. Henry Regier retired as Director of the Institute for Environmental Studies, University of Toronto, on June 30, 1994, although he is still at the University of Toronto (Zoology) for one year. He is and has been a pioneer in environmental ethics at both the theoretical and practical levels, has influenced policy in Ontario, the Great Lakes, and has been a moving force at the international level of a number of major organizations, such as FAO, the International Joint Commission and recently as scientific advisor to the Hon. Sergio Marchi, for the Canadian delegation to the Cairo Conference on Population and Environment. He pioneered the concept of ecosystem integrity, particularly for waters, and has inspired, helped and supported students and colleagues for years. We wish him well in his second career, as he has no intention of slowing down. (Contributed by, and with particular thanks, from former student, Laura Westra.)

A conference on Consumption, Global Stewardship, and the Good Life, was held 29 Sept.-2 Oct. 1994, Institute for Philosophy and Public Policy, School of Public Affairs, University of Maryland at College Park. Speakers included Amartya Sen (Harvard University), Herman Daly (University of Maryland), Mark Dourojeanni (Inter-American Development Bank), Mark Sagoff (Institute for Philosophy and Public Policy). "Consumption and the Good Life," Martha Nussbaum (Brown University), Frithjof Bergmann (University of Michigan), Peter Brown (University of Maryland), Robert E. Lane (Yale University), Vicki Robin (New Roadmap Foundation), and many others.

Val Plumwood (Australia) is visiting at North Carolina State University this year but not in the Philosophy Dept. She wants to give papers. For more information, contact Don VandeVeer at UNSC.

David Rothenberg continues as Editor of the Trumpeter, a refereed publication. All well-written, non-jargonistic contributions of general interest in environmental thought are welcome, including radical approaches and unconventional ways of presenting them. Send to David at: Dept. of Social Science and Policy Studies, New Jersey Institute of Technology, University Heights, Newark, NJ 07102. Tel. (201)596-3289; FAX (201)565- 0586; Email: <rothenberg@admin.njit.edu>

Papers given at the Manchester INTECOL meeting in August 1994 will be published in an anthology entitled Ecologists and Ethical Judgements, ed. Nigel Cooper and Bob Carling (Chapman & Hall, 1995), as a special issue of the journal Biodiversity and Conservation, summer 1995. Due to be included are the following papers: Introduction - Nigel Cooper; Food Chains, Foucault and Phenomenology - J.M. Howarth; Structures in Nature and the Grounds of Ethical Significance - A. Holland; The Development of Interest in Environmental Ethics - A. Brennan; An Extensionist Environmental Ethic - G.L. Comstock; Religion: Help or Hindrance? - C.B. DeWitt; Christian Theological Resources for Environmental Ethics - B. Waters; Learning from the past - environmental ethics in the great epic of India - N. Sivakumar; Ecological Needs and Social Justice - J.P. Barkham; Christianity and the Ethics of Human Population Change -

S.P. Bratton; Ethical and Practical Considerations in Working with Indigenous, Traditional and Local Communities: Collaborative Research and Intellectual Property Rights - D.A. Posey, G. Duttfield & K. Plenderleith; Ethical Considerations and Animal Welfare in Ecological Field Studies - R.J. Putman; Conflicting Priorities in Site Management - E.T. Idle; Translocating endangered plants - L. Farrell.

The United Nations Environment Programme (UNEP) has begun issuing a Biannual Bulletin on Environmental Law, providing a regular source of information on UNEP's activities in the area of environmental law. The Bulletin details major activities of UNEP in the legal and institutional fields in five parts: General Information; International Legal Instruments; National Legislation and Institutions; Environmental Training, Education and Information; and News and Convention Secretariats. Those interested in receiving a copy of the Bulletin, as well as other UNEP publications in the field, and in having their names and contact addresses included in the ELI/PAC mailing list, should write to: Mr. Sun Lin, Director, ELI/PAC, UNEP, P.O. Box 30552, Nairobi, Kenya, FAX (254-2) 230198

Jack Weir is co-editor of the ISEE Newsletter, and Holmes Rolston continues as co-editor as well. Weir is the producing editor, and items should preferentially be sent to him. Send information for the Newsletter to Jack via Email where possible: Address: <iseenewsletter@msuacad.morehead-st.edu> Note the hyphen! You can also send Email to Weir's box: <j.weir@msuacad.morehead-st.edu>. Postal address: Jack Weir, Dept. of Philosophy, UPO 662, Morehead State University, Morehead, Kentucky 40351-1689 USA. Phone: 606-784-0046 (Home Office); 606-783-2785 (Campus Office); 606-783-2185 (Secretary, Dept. of English, Foreign Languages and Philosophy); FAX 606-783-2678 -- include Weir's name on the FAX).

Robert Elliot is the contact person for Australia and New Zealand. Send membership forms and dues in amount \$ 15.00 Australian (\$ 7.50 for students) to him. Address: Department of Philosophy, University of New England, Armidale, NSW, 2351, Australia. Phone: 61 (country code) (0)67 732657 (direct line). (0)67 732896 (Dept. office). FAX 61 (country code) (0)67 733317. E-mail: <relliot@metz.une.edu.au>

Wouter Achterberg is the contact person for the United Kingdom and Europe (For Eastern Europe and the former Soviet Union, see below.) Those in Western Europe and the Mediterranean should send their dues to him (ú 6.50, or the equivalent of \$ 10 US) at the Faculty of Philosophy, University of Amsterdam, Nieuwe Doelenstraat 15, 1012 CP Amsterdam, Netherlands. He reports that it is difficult to cash checks in this amount without losing a substantial part of the value of the check and encourages sending bank notes and cash directly to him, as it is reasonably safe. Contact him if in doubt what currencies he can accept. FAX: 31 (country code) 20 (city code) 5254503. Phone: 31-20-5254530.

Jan Wawrzyniak is the contact person for Eastern Europe and the former Soviet Union. He is on the faculty in the Department of Philosophy at Adam Mickiewicz University of Poznan, Poland. Because of the fluid economic situation in Eastern Europe, members and others should contact him regarding the amount of dues and the method of payment. He also requests that persons in Eastern Europe send him information relevant to a regional newsletter attachment to this

newsletter. Business address: Institut Filozofii, Adam Mickiewicz University, 60-569 Poznan, Szamarzewskiego 91c, Poland. Phone: 48 (country code) 61 (city code) 46461, ext. 288, 280. FAX: 48 (country code) 61 (city code) 535535. Home address: 60-592 Poznan, Szafirowa 7, Poland. Phone 48/61/417275. Checks can be sent to his home with more security.

Professor Johan P. Hattingh, Department of Philosophy, University of Stellenbosch, 7600 Stellenbosch, South Africa, is the ISEE contact for Africa. Contact him with regard to membership and dues payable, again the approximate equivalent of \$US 10, but with appropriate adjustment for currency differentials and purchasing power. Hattingh heads the Unit for Environmental Ethics at Stellenbosch. Phone: 27 (country code) 21 (city code) 808-2058 (office), 808-2418 (secretary); 887-9025 (home); FAX: 886-4343. E-mail <jph2@maties.sun.ac.za>

Professor Yu Mouchang, Institute of Philosophy, Chinese Academy of Social Sciences, Beijing 100732, P. R. China, is the contact person in mainland China.

Annual membership dues for ISEE are US \$15 per year in 1995 in the United States and Canadian \$20 in Canada. Dues overseas remain unchanged (ú 6.50, or the equivalent, or about US \$10), both in Australia and in Europe. Students are half price. If you've not done so, please send in your dues now, to L. Westra (address below). SEE member Mr. A. D. de Leeuw, 4016 Yeo Street, Terrace, B.C., V8G 2S9, Canada requests information about buying out of print environmental books, such as, Passmore's 1974 Man's Responsibility to Nature, and others by Midgley, Dombrowski, Lorenz, and others. He's willing to cover costs. Write him or L. Westra for a full list.

ISEE Newsletter on Internet (Gopher) Back issues of the ISEE Newsletters are now available, though not the current one, 24 hours a day, from anywhere in the world, if you have access to the educational network. To retrieve a back issue Newsletter: At your internet system prompt, send the telnet message: <gopher msuacad.morehead-st.edu> ou will get a welcome screen at Morehead State University, Morehead, Kentucky, and a menu with several choices. Take: 6. Electronic Journals, then take the ISEE option. Find the newsletter(s) you wish, either read on screen, or, better, at any point after the file has been retrieved and is on screen, e-mail it to yourself. When you take q to Quit, you will be given a menu opportunity to mail the entire file (this issue of the newsletter) to your e-mail address. Download this to a disk on your local computer. You can retrieve it into WordPerfect or whatever wordprocessing software you wish. More detail on this in the Newsletter, 5, 3, Fall 1994.

Master Environmental Ethics Bibliography The "Master Bibliography in Environmental Ethics" is now available, with the completed 1994 update ready January 31. For more detail, see the Newsletter, 5, 3, Fall 1994. This bibliography contains all the bibliographic entries from the Newsletter of the society, volumes 1(1990) - 5(1994), all the articles and abstracts from the journal Environmental Ethics, volumes 1(1979) - 16(1994), all the articles and abstracts from the journal Environmental Values, volumes 1(1992) -3(1994), and the other bibliographies. It is available in either WordPerfect 5.1 (a DOS format) or in Macintosh format. The bibliography is in two halves, A-L and M-Z. One way to use it is simply to print out each half, take it to Kinko's, have it spiral bound, label the covers, and you instantly have as full a reference base as otherwise

exists in print. Another way to use it is to search through it and copy out the various entries in which you are interested, stringing these together into a text of your own on the second screen in your software. The bibliography can be searched for key words, depending on your software. We are working on making it available in selected reference formats, such as EndNote. Additions are welcome and will be incorporated into the data base. Those that arrive on disk in WordPerfect 5.1 formatted similarly will be given immediate attention; others will take longer. Keyboarding is time-consuming. Those that arrive on E-mail are essentially a DOS text and can be brought into WordPerfect rather easily. Copies of these disks are available from any of the ISEE contact persons throughout the world (see their names and addresses below) and at selected other locations. The compiler of the bibliography, from whom disks may be obtained is: Holmes Rolston, III, Department of Philosophy, Colorado State University, Fort Collins, CO 80523, USA. Phone: 303/491-6315 - office. FAX: 303/491-4900. E-mail: <rolston@lamar.colostate.edu>. Send \$5 to Rolston, stating whether you wish the WordPerfect or the Macintosh disk.

Deep Ecology in the High Arctic An interdisciplinary symposium on ecophilosophy was held in Longyearbyen, Svalbard, High Arctic, from 29 August to 2 September 1994. The first, public, session featured two papers: Arne Naess, "The Planetary Challenge" and Andrew Brennan, "Placing Ourselves in Nature." Many students from the University Courses Centre in Svalbard attended this session, and each paper provoked lively discussion. The remaining, closed sessions featured the following papers: Jacob Meloe (Tromsø), "The Role of Nature in Traditional Fishing Communities"; Niels Jernsletten (Tromsø), "Traditional Cultural Knowledge"; Bill Devall (California), "How Do We Change Attitudes and Behaviour?"; Kristin Shrader-Frechette (South Florida), "Environmental Activism and the Duties of Scholars to Create Change"; John Heap (Scott Polar Research Institute, Cambridge), "Environmental Protection in the Polar Regions: A Bureaucrat's View." The last afternoon's discussion session was chaired and facilitated by Dennis Cosgrove (London). Participants at the seminar had the opportunity to enjoy and study the High Arctic by means of a mountain walk and a lengthy boat trip to the Russian settlement of Pyramiden and a close view of a glacier. Snow fell the day before the symposium commenced, and participants were able to get a taste of the Arctic winter. The symposium was sponsored jointly by the University of Tromsø, the Norwegian Polar Institute, the Norwegian Ministry of Justice and the Governor of Svalbard. It is intended to issue the papers in a volume published by the University of Tromsø Press. Svalbard is an archipelago lying deep inside the Arctic Circle. The territory is administered by Norway under a treaty signed by 41 nations.

The settlement of Longyearbyen is located 78 degrees north and is reached by a one and one-half hour flight from Tromsø. Longyearbyen was established to exploit the rich coal seams found locally. Coal is also mined at two Russian settlements, Pyramiden and Barentsberg. Apart from these small settlements, the rest of the environment is untouched by development. The archipelago has rich marine life and has also been a favoured place for hunters and trappers. However, only five hunters now remain. A large part of the archipelago consists of conservation areas and permanent icefields.

Arctic fox and reindeer abound, and there are also polar bears. There are no trees on Svalbard. Most of the summer, the land is bathed in the midnight sun, and the long darkness begins in November. Longyearbyen is a base for the Norwegian Polar Institute which conducts research on

Arctic ecology and has a special interest in polar bear studies.

The effect of marine pollution carried by currents from Northern Russia is also being documented. The four Norwegian universities have established a university courses centre at which students of marine biology, Arctic ecology and other relevant disciplines can spend up to a year in field studies. The Polar Institute and the University courses centre are setting up a joint library and would appreciate donations of books on environmental ethics and policy. Beginning in 1995, it is intended to open the University centre to overseas students and to run international summer schools. For further information, and to make donations of material, please contact either Bjorn Frantzen, Norwegian Polar Institute, P.O. Box 505, 9170 Longyearbyen, Norway, or Sigmund Spjelkavik, The University Courses on Svalbard, P.O. Box 156, 9170 Longyearbyen, Norway. (Thanks to Andrew Brennan.)

Human Ecology in Brussels A wide range of students from many different countries are attracted to the program because of its wide range and low fees. The core units in first year include: overviews of human ecology, ecology, statistics and computing; a series of units on biosphere structure and processes including water, meteorology and soil; and topical units on pollution, ecology and industry, and environmental decision-making. First year options include environmental ethics, socio-economics, environmental law and applications of technology. In second year, students complete a dissertation and also take classes on physical aspects of pollution and resource management, human populations, environment and health, human settlements and environmental sociology and economics. The MSc program is taught by staff from many countries and the language of instruction is English. All work for assessment has to be submitted in English also. For those with a background in Arts, Social Sciences and Law a new program has been introduced, leading to a Master's degree in "Ecotechnie". The Ecotechnie degree shares some units with the program in Human Ecology, but does not assume familiarity with university-level work in science or mathematics. For inquiries about both programs, please write to Karin DeBruyn, Vrije Universiteit Brussel (Free University Brussels), Human Ecology Department, Laarbeeklaan 103, B- 1090 Brussels, Belgium Tel. 32-2-477.42.81 FAX 32-2-477.49.64. Email <kdebruyn@meko.vub.ac.be> Faculty at the Free University of Brussels includes Andrew Brennan, who taught his annual 15 hour environmental ethics unit in October. The unit is part of the Master's degree in Human Ecology, an intensive two-year program aimed at graduates in medicine, public health, environmental science or other relevant sciences. The degree conforms to WHO and UNESCO requirements for recognition. Students are often already established in careers as doctors, government officials, forestry managers and take the degree to increase their understanding of humans in relation to natural systems.

## POSITIONS AVAILABLE

University of South Florida, Tampa. Tenure track, beginning August 1995. Area of specialty: Environmental ethics. Area of competence: Analytic philosophy, decision theory, philosophy of science, or ethical theory. Assistant professor, but more senior persons may apply. Joint appointment in philosophy department and environmental sciences and policy program. Contact: Willis Truitt, Chair, Philosophy Dept., CPR 107, University of South Florida, Tampa, FL 33620-5550.

## VIDEOTAPES AND MEDIA

John Muir himself--almost! Conversation with a Tramp is Lee Stetson's famous reenactment of Muir, largely using his own words, now done in the summers for twelve years in Yosemite Valley and touring the United States the remainder of the year. The excellent video is available, about 60 minutes; use it all, or use excerpts to bring Muir back to life. \$ 19.95, plus \$ 3.00 shipping. Lee Stetson, Box 811, Yosemite, CA 95389.

Fur Flying? A ten minute interview with Dan Mathews of PETA (People for the Ethical Treatment of Animals) by Elizabeth Vargas, aired on Dateline, NBC, December 20, 1994. Features many models and media persons who are against the use of fur, especially in fashions. Nicely photographed and edited. Mathews is the inspiration for many controversial PETA tactics, which includes nude models with signs, "I'd rather go naked than wear fur!", also the harassment of those who do appear in public in fur. He defends his views, essentially no invasive uses of animals in fashion, or for food, or for research, also no wool, no silk, and comes across confidently, if rather extreme, before a probing and sometimes hostile interviewer. Sure to provoke discussion.

An Introduction to Ecological Economics. 45 minutes. \$ 25.00. 1991. Griesinger Films, 7300 Old Mill Road, Gates Mills, OH 44040. Phone/FAX 216- 423-1601. (See Newsletter v. 5, # 3; more detail now available.) Vignettes of speakers making presentations at a conference in Madison, Wisconsin, illustrated with voice-over scenes of environmental degradation and natural resource depletion. Seven sections: Natural Capital, Ecological Economics, Gross National Product, the Index for Sustainable Economic Welfare, Empiricism and Values, Growth, Conservation Generation. A prominent theme is that our system of economic national accounting (gross national product, profit, utility) is not an adequate barometer of social well-being, much less of ecological health. Speakers call for better measures, often criticizing the reduction of complex, multidimensional, ecological, economic phenomena to one dimensional indicators, and particularly the ethical and axiological inadequacy of such reduction.

## RECENT ARTICLES AND BOOKS

--Sterba, James P., ed., *Earth Ethics: Environmental Ethics, Animal Rights, and Practical Applications*. Englewood Cliffs, NJ: Prentice-Hall, 1995. Sections: Animal Liberation and Animal Rights; Respect for Nature; The Land Ethic/Deep Ecology; Attempts at Reconciliation (of animal rights vs. land ethic; of anthropocentrism vs. nonanthropocentrism); Ecological Feminism; Social Ecology and Christian Ecology; and in a section on practical applications: Vegetarianism; Global Warming, Acid Rain, and Ozone Depletion; Endangered Species; Radical Environmental Action; Economic Growth and Environmental Quality. 36 authors, a major anthology in the field. Sterba teaches philosophy at the University of Notre Dame.

Sixteen anthologies in environmental ethics have entered the market in recent years:

--Armstrong and Botzler, eds., *Environmental Ethics: Convergence and Divergence*. McGraw Hill.

--Attfield and Belsey, eds., *Philosophy and the Natural Environment*. Cambridge.

--Bormann and Kellert, eds., *Ecology, Economics, Ethics: The Broken Circle*. Yale.

--Cooper and Palmer, eds. *The Environment in Question*. Routledge.

--Engel and Engel, eds., *Ethics of Environment and Development: Global Challenge and International Response*. Arizona.

--FerrÇ and Hartel, eds., *Ethics and Environmental Policy: Theory Meets Practice*. Georgia.

--Gruen and Jamieson, eds., *Reflecting on Nature: Readings in Environmental Philosophy*. Oxford.

--List, ed., *Radical Environmentalism: Philosophy and Tactics*. Wadsworth.

--Newton and Dillingham, *Watersheds: Classic Cases in Environmental Ethics*. Wadsworth.

--Pojman, ed., *Environmental Ethics: Readings in Theory and Application*. Jones and Bartlett.

--Scherer, ed., *Upstream/Downstream: Issues in Environmental Ethics*. Temple.

--Sterba, ed., *Earth Ethics: Environmental Ethics, Animal Rights, and Practical Applications*. Prentice-Hall.

--VanDeVeer and Pierce, eds., *People, Penguins, and Plastic Trees*, 2nd ed. Wadsworth.

--VanDeVeer and Pierce, eds., *The Environmental Ethics and Policy Book: Philosophy, Ecology, Economics*. Wadsworth.

--Westphal and Westphal, eds., *Planet in Peril: Essays in Environmental Ethics*. Harcourt Brace.

--Zimmerman et al., eds., *Environmental Philosophy: From Animal Rights to Radical Ecology*. Prentice-Hall. Still in print, though older:

--Scherer and Attig, eds., *Ethics and the Environment*. Prentice-Hall.

--Regan, ed., *Earthbound: New Introductory Essays in Environmental Ethics*. Reprinted in 1990 by Waveland Press (Prospect Heights, IL; \$ 19.95; 708/634- 0081), first published by Random House, 1984. Wadsworth has four titles in the field (including *Des Jardins*, *Environmental Ethics*). Prentice-Hall has four (including Hargrove, *Foundations of Environmental Ethics*, or

five, counting the Kinsley volume in religion.

--Sylvan, Richard, and David Bennett, *The Greening of Ethics: From Human Chauvinism to Deep-Green Theory*. Tucson: University of Arizona Press; and Cambridge UK: White Horse Press, 1994. Pp. 269. \$22.95 paper, \$45.00 cloth; £11.95 paper, £29.95 cloth. Environmental ethics from "down under" showing how topsy turvy the uppermost Western, first world view really is.

The most insightful work of many to come out of Australia so far as it seeks to define, in its own national development, Australia's unique contribution to the greening of ethics. Forceful, critical, subversive, even satirical, and, ultimately, quite constructive, Sylvan and Bennett show that if conservation fails in Australia, then all hope of convincing the rest of the world of its importance is dead. Sylvan and Bennett's analysis is by no means peculiarly Australian. Environmental ethics, they argue, everywhere comes in shallow, intermediate, and deep forms, and the authors use their position to evaluate what is happening in Europe and the United States. In their most original chapter (5), the authors set out their "deep-green theory," both sharing features with, and contrasted with, "deep ecology." The earlier chapters are mostly "de-constructionist," but in conclusion the authors advance their own construction of an appropriately green ethics based on intrinsic value in nature. The final chapters look at practical applications, always more radical than we like first to suppose. Sylvan is in philosophy at the Research School of Social Sciences, Australian National University, Canberra. Bennett is environment officer with the Aboriginal and Torres Strait Islander Commission in Canberra.

--Marietta, Don E., Jr., *For People and the Planet: Holism and Humanism in Environmental Ethics*. Philadelphia: Temple University Press, 1994. Human duty is based on a critical and holistic philosophy of nature and a humanistic ethics. The holism stresses how humans are a part of the system of nature and rejects any claim that nature exists for humans. But holism must avoid exaggerated statements of its position, recognizing that ecological science is subject to change and growth. Humanism recognizes that humans, though part of nature, are a distinct part of nature. Without making unsupportable claims that humans are morally superior to other living things, humans are different in significant ways from the rest of nature.

The humanist heritage has developed moral concepts such as justice, freedom, and development of the human personality that are too valuable to be sacrificed to environmental concern. An ethics results that combines the insights of environmental ethics and of humanism. Foreword by Holmes Rolston. Marietta is in philosophy at Florida Atlantic College.

--Weston, Anthony, *Back to Earth: Tomorrow's Environmentalism*. Philadelphia: Temple University Press, 1994. 200 pages. \$ 17.95, paper. \$ 39.95 cloth. "Weston goes beyond the 'environmental ethics' approach to argue for the reinstatement of our age-old connections to Nature and other animals, ... a sense of the 'vividness, vibrancy, and aliveness of the rest of the natural world.' Weston draws upon an encyclopedic knowledge of recent research in animal behavior in his proposal for a new trans-species 'etiquette.' He also provides practical suggestions for redesigning our cities and neighborhoods in bioregional ways to help bring about a new ecological relationship with nature." -- George Sessions. Humans must put aside their presuppositions about their centrality and superiority and recover their participation in the world

through a rediscovery of touch and smell, noticing the details of nature, restoring the great annual celebrations at the turns of the seasons, build Earth-friendly houses, and plan neighborhoods that allow for other-than-human beings. Weston teaches philosophy at Elon College, North Carolina.

--Zimmerman, Michael, *Contesting Earth's Future: Radical Ecology and Postmodernity*. Berkeley: University of California Press, 1994. 447 pages. Cloth \$30.00. Having once interpreted Heidegger as a forerunner of deep ecology, Zimmerman rethinks his position about deep ecology in particular and radical ecology in general (including ecofeminism and social ecology) in view of recent disclosures of the links between Heidegger's thought and Nazism. To what extent does radical ecology (unwittingly) hold views that are consistent with the reactionary attitudes of fascism? In what respects is radical ecology a dimension of "postmodernity," defined as an epoch that questions the progressive optimism of technological modernity? Zimmerman tries to answer these questions in part by assessing the recent debates among deep ecology, social ecology, and ecofeminism. Appealing to the work of transpersonal theorist Ken Wilber, who maintains that humankind is taking part in a progressive development of consciousness, of which the ecological crisis is a surmountable symptom, Zimmerman tries to mediate the sometimes bitter dispute between deep ecology and social ecology. Though some ecofeminists maintain that "progressive" ideas justify the domination of emotions, the body, woman, and nature, Zimmerman shows the extent to which ecofeminism can and should acknowledge the "emancipatory" dimension of modernity. Finally, recognizing that radical ecology's hope for a low-tech future may well go unfulfilled, Zimmerman explores "critical postmodern" visions of the future high-tech relation between humanity and nature, including the startling vision contained in Donna Haraway's "Cyborg Manifesto." Zimmerman is in philosophy at Tulane University, New Orleans. Counting the four titles above, there are now some twenty-five systematic works in environmental ethics:

--Attfield, *The Ethics of Environmental Concern*.

--Brennan, *Thinking About Nature: An Investigation of Nature, Value and Ecology*.

--Callicott, *In Defense of the Land Ethic*.

--Callicott, *Earth's Insights*.

--Des Jardins, *Environmental Ethics*.

--Devall and Sessions, *Deep Ecology*.

--Drengson, *Beyond Environmental Crisis*.

--Fox, *Toward a Transpersonal Ecology*.

--Hargrove, *Foundations of Environmental Ethics*.

--Johnson, *A Morally Deep World*.

--Mathews, *The Ecological Self*.

--McLaughlin, *Regarding Nature*.

--Naess, *Ecology, Community, and Lifestyle*.

--Norton, *Toward Unity Among Environmentalists*.

--Rolston, *Conserving Natural Value*.

--Rolston, *Environmental Ethics*.

--Sagoff, *The Economy of the Earth*.

--Stone, *Earth and Other Ethics*.

--Taylor, *Respect for Nature*.

--Wenz, *Environmental Justice*.

--Westra, *An Environmental Proposal for Ethics: The Principle of Integrity*.

--Soromenho-Marques, Viriato, *Regressar Ò Terra: Consciência Ecológica e Política de Ambiente* (Return to Earth: Ecological Conscience and Environmental Policy. Lisbon: Fim de Sçculo Edições, Lda., 1994. 151 pages. Paper. ISBN 972-754-073-2 Twelve essays (all in Portuguese): Part I. Ecological Conscience: Emerging Aspects of a New World Vision. 1. "Ecologia, saber e crise contemporânea" ("Ecology, Knowledge and the Contemporary Crisis"). 2. "Seis reflexões sobre o ambiente" ("Six Reflection on the Environment"). 3. "Economia, ecologia e rigor" ("Economics, Ecology and Methodological Rigor") 4. "Tecnocracia ou economia global? Duas notas críticas" ("Technology or Global Economy? Two Critical Notes"). 5. "Justiça e sentido da Terra" ("Justice and the Sense of the Earth"). 6. "Cidadania, democracia e crise ambiental" ("Citizenship, Democracy and the Environmental Crisis"). Part II. Environmental Policy: The Difficult Apprenticeship of a New Way to Inhabit the Earth. 7. "1972-1992. Vinte anos entre o perigo e a esperança" ("1972- 1992: Twenty Years Between Danger and Hope"). 8. "O problema de decisão em política de ambiente" ("The Problem of Decision in Environmental Policy"). 9. "Política de ambiente em Portugal. Condições, critérios e perspectivas" ("Environmental Policy in Portugal: Conditions, Criteria, and Perspectives"). 10. "Política de ambiente e política externa: Notas para uma leitura de conjunto de situação portuguesa" ("Environmental Policy and Foreign Policy: Notes for a Reading of the Totality of the Portuguese Situation"). 11. "Política de ambiente e desenvolvimento sustentável em Portugal: Problemas e perspectivas" ("Environmental Policy and Sustainable Development in Portugal: Problems and Perspectives"). 12. "Ecopolítica e destino histórico" ("Ecopolitics and Historical Destiny"). Soromenho-Marques is professor of philosophy at Cidade Universitária, Lisboa, Portugal, and the chair of Quercus, Portugal's National Association for the Conservation of Nature.

--Barreto, Lu's Soares, *ética Ambiental: Uma Anotação Introdutória* (Environmental Ethics: An Annotated Introduction). 61 pages. Lisbon: Publicações Ciência Vida, Lda., 1994. ISBN 972-590-055-3. Chapter titles (in Portuguese): Introduction. General Perspective. Moral Extensionism.

The Christian Perspective. Biocentrism. Ecocentrism. Radical Environmentalism (Deep Ecology, Ecofeminism, Social Ecology, Bioregionalism). Closing Commentary. Selected Bibliography. A brief introduction to the main schools of thought; the author is quite well read in the literature in English. Barreto is Professor Catedrático (Tenured) at the Instituto Superior de Agronomia, Lisbon. Address: Instituto Superior de Agronomia, Tapada da Ajuda, P-1399 Lisboa Codex, Portugal.

--Environmental Politics, which began publication in the spring of 1992, is proving a lively forum for exchange of ideas, more often than not with implications for environmental ethics. The price (ú 35.00, or \$ 50.00 individuals) may discourage individual subscriptions, but encourage your library to get it (ú 80.00, or \$ 120.00). Also you can get automatic E-mail notice of each issue's contents through the UnCover Reveal service (see above). Editors are Michael Waller and Stephen C. Young, Department of Government, University of Manchester, UK. Published by Frank Cass and Company, Ltd., Gainsborough House, 11 Gainsborough Road, London E11 1RS, UK. The winter 1993 (vol. 2, no. 4) issue is: "Rio: Unravelling the Consequences."

--Journal of Environment and Development is published twice a year, concerned with development and conservation, especially on international levels. Seeks to combine legal, scientific, policymaking, and academic communities. Sample articles: William K. Reilly, "The Greening of NAFTA: Continental Environmental Cooperation" (Winter 1993); Heraldo Munoz, "The 'Green' vs. Trade Debate in the Americas" (Winter 1994). JED, University of California at San Diego, Mail Code 0519, La Jolla, CA 92093. Phone 619/534- 7617.

--Kinsley, David, *Ecology and Religion: Ecological Spirituality in Cross- Cultural Perspective*. Englewood Cliffs, NJ: Prentice-Hall, 1995. 248 pages. Chapters: "The Mistassini Cree: Hunting as a Religious Ritual," "Australian Aboriginal Religion," "Native American Religion: Ecological Themes," chapters on Hinduism, Buddhism, Chinese religion, "Christianity as Ecologically Harmful," "Christianity as Ecologically Responsible," "Nature Disenchanted," "Ecological Spirituality in Thoreau, Muir, and Leopold," "Contemporary Ecotheology," "Animal Rights and Ecological Ethics," "Deep Ecology," "Ecoactivism," "Ecofeminism: The Exploitation of Nature and Women," "Four Ecovisionaries: Murray Bookchin, Wendell Berry, Gary Snyder, and Barry Lopez." Kinsley is at McMaster University.

--Stankey, George H., "Wilderness around the World," *Journal of Forestry* 91 (no. 2, February):33-36. Protection efforts are expanding, despite varying definitions of "wilderness," typically an area not substantially modified by modern human activity and reflecting primarily a natural character. A preliminary survey by UNEP, the World Bank, the World Resources Institute, and the Sierra Club finds that perhaps one-third of the terrestrial Earth is in this condition. Outside the U.S., wilderness areas exist by legislation in Australia, Canada, Finland, New Zealand, and South Africa; and administratively in Zimbabwe, Sweden, and Kenya. The

Mavuradonha Wilderness in Zimbabwe is the first such area designation in a developing nation, managed for a variety of activities with resulting economic benefits to local villagers and farmers. Stankey is in the Department of Forest Resources, Oregon State University. This whole issue of the Journal of Forestry is on wilderness management.

--Zeveloff, Samuel I., L. Mikel Vause, and William H. McVaugh, eds., *Wilderness Tapestry: An Eclectic Approach*. Reno: University of Nevada Press, 1992. About two dozen articles from diverse disciplines, growing out of the North American Interdisciplinary Wilderness Conferences. Includes Wayne Ouderkirk, "Wilderness Restoration: A Preliminary Philosophical Analysis"; Felicia F. Campbell, "The Wilderness Within Us: Women and Wilderness"; many more; and a bibliography of wilderness books. The editors, in zoology, English, and psychology, are all at Weber State University, Ogden, Utah.

--DeWitt, Calvin, *Earth-Wise: Reclaiming God's Creation: A Biblical Response to Environmental Issues*. Grand Rapids, MI: CRC Publications, 1994. \$ 6.50. We should not panic about the state of the environment; its final maintenance and care rests in God's divine hands. At the same time, God has appointed humans the stewards of creation and requires us to consider what consequences our actions may impose on God's creation. DeWitt is professor of environmental studies at the University of Wisconsin-Madison.

--Journal of Forestry, "Nongovernmental Organizations: Their Power and Influence in the U.S. and the World," vol. 92, no. 6, June 1994. The whole issue is on nongovernmental organizations.

--Shrader-Frechette, Kristin S., and Earl D. McCoy, "Ecology and Environmental Problem-Solving," *The Environmental Professional* 16(1994):342- 347. Contemporary community ecology has neither precise foundational concepts dealing with stability or community structure nor a developed general theory yielding precise predictive power. As a consequence, it has no exceptionless empirical laws useful to environmental problem-solving. Despite these deficiencies, ecology can provide a foundation for environmental policy by means of autecology, natural history, and detailed case studies. By focusing on less theoretical and more practical scientific work, ecologists have been able to guide conservation decisions in cases such as controlling the vampire bat and protecting the red-cockaded woodpecker. Shrader-Frechette is in philosophy and McCoy in biology at the University of South Florida.

--Parton, Glenn, "The Rise of Primitivism and the Fall of Civilization: A Reply to J.B. Callicott and Holmes Rolston, III, on Wilderness," *The Environmental Professional* 16(1994):366-373. Wilderness is a medium that enfolds everything, not something "out there" independently of humans. Wilderness ought to be the habitat for humans. Civilization terminates wilderness and the good of beings who dwell there, including humans. Primitivism, reemerging as an alternative form of life, is a matter of correcting and undoing that fatal fork in the road that exiled us from our homeland. The price of the goods and services of civilization is too high. We humans should not have come out of the wilderness and we can and should go back to living and working in the wild. That primitive freedom and happiness cannot be surpassed, but only marred and lost. Callicott and Rolston are caught in a people vs. no-people in the wilderness argument, when real people must be in the wilderness, not in civilization. Parton is with the South Fork Mountain Defense in Weaverville, CA.

--McKibben, Bill, *The Comforting Whirlwind: God, Job, and the Scale of Creation*. Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 1994. Paper, \$ 8.99. McKibben, author of *The End of Nature*, here undertakes an environmentalist reading of the book of Job.

--Freyfogle, Eric T., "The Dilemma of Wendell Berry," *University of Illinois Law Review* 1994, no. 2:363-385. Because all unsustainable actions must, by definition, cease one day, it is far better that we change those actions now, by conscious choice, while we are still able to carve out productive and satisfying lives. The first step is for each of us to turn inward and make those changes in our own lives that will enable us to live lightly on the land. Only so can we promote the lasting health of the natural and social communities of which we are inextricably a part. In this vision, Wendell Berry is a twentieth century prophet, who, as perceptively and energetically as anyone, has borne witness to the profound moral challenges of the environmental age. Freyfogle is professor of law, University of Illinois, and the author of *Justice and the Earth*.

--Freyfogle, Eric T., "Owning the Wolf: Green Politics: Property Rights, Ecology Rights," *Dissent*, Fall 1994, pp. 481-487. The ranchers who object to the wolf's return own the land the wolf wants to roam. If private property means anything--so one argument goes--it means the right to halt trespass by animals with two legs or four. Private property claims have become a rallying cry for anti-environmentalism, and these claims deserve a fair examination. What does it mean for a person to own land that is an integral part of an ecosystem of which humans are a part? Has there been a "takings" when the landowner is required to maintain these ecosystemic processes? Human institutions need reshaping in recognition of the functioning biotic communities where people live. Among the institutions that will require change, the institution of private property stands high on the list. Thoughtful, brief article, eminently suited for raising these issues with students. Freyfogle is professor of law, University of Illinois.

--Posewitz, Jim, *Beyond Fair Chase: The Ethic and Tradition of Hunting*. Helena, MT: Falcon Press, 1994. Paper. \$ 5.95. Cloth, \$ 17.95. "As hunters we enjoy the rare privilege of participating in the natural process rather than only observing it from a distance. We become, for a time a predator like the human hunters of our distant origins. We are however, a minority; and if we are to continue, we must do it in a way that is acceptable to the majority." "You need to be familiar with the field, the woods, the marsh, the forest, or the mountains where you hunt. If you work hard and long at this aspect of hunting, you can become a part of the place you hunt. You will sense when you start to belong to the country. Go afield often enough and stay out long enough and it will happen. Little by little you will become less of an intruder. More animals will seem to show themselves to you. You are no longer a stranger in their world; you have become part of it. Many people hunt for a lifetime without learning this, and they miss the most rewarding part of being a hunter." Already over 100,000 copies of this book have been used in hunter education programs in thirty states. Posewitz is a longtime Montana conservationist, and founder of Orion, The Hunters Institute.

--Nickel, James W., "Ethnocide and Indigenous Peoples," *Journal of Social Philosophy*, 25th Special Anniversary Issue, 1994, pp. 84-98. There is a qualified right against ethnocide (cultural genocide). A prohibition of ethnocide protects minorities and indigenous peoples against the inclination of mainstreamers to force them to abandon their distinctive ways of life and

assimilate rapidly into the mainstream culture. Ethnocide is like genocide in being a means of getting rid of a group. Genocide involves the physical elimination of the group, whereas ethnocide could, in principle, leave all of the members of the group alive. Nickel is in philosophy at the University of Colorado.

--Barbour, Ian G., "Experiencing and Interpreting Nature in Science and Religion," *Zygon* 29(1994):457-487. Three paths from nature to religious interpretation: (1) From religious experience in the context of nature. (2) Scientific findings concerning cosmology or evolution used as evidence of design. (3) Traditional religious beliefs reformulated in the light of current natural science. All three can contribute to relating science and religion. Barbour is in physics and religion at Carleton College, emeritus.

--Gilkey, Langdon, "Nature as the Image of God: Reflections on the Signs of the Sacred," *Zygon* 29(1994):489-505. Aspects of the scientific view of nature examined for signs or traces of the sacred, as early religious apprehension surely supposed. Nature's power and order, and the strange dialectic of life and death are evident in modern biology, as also in all early religion. Gilkey is in religion at Georgetown University, formerly the University of Chicago.

--Hefner, Philip, "Can Nature Truly Be Our Friend?" *Zygon* 29(1994):507-528. Western culture has not offered a concept of nature rich enough to allow for an understanding of it as a domain of graciousness. Christian theology has consistently spoken of nature in terms that defy the limitations of the authorized views proposed by the ambient Western cultures. Science today furnishes for the first time an authorized concept of nature that is large and dynamic enough to entertain the dimension of grace. Hefner is in theology at the Lutheran School of Theology, Chicago.

--Goodenough, Ursula W., "The Religious Dimensions of the Biological Narrative," *Zygon* 29(1994):603-618. Three concepts--meaning, valuation, and purpose--are central to the entire biological enterprise, and the continuation of this enterprise is a sacred religious trust. Goodenough is a cell/molecular biologist at Washington University, St. Louis.

--Abelson, Raziell and Marie-Louise Friquegnon, eds. *Ethics for Modern Life*, 5th edition. New York: St. Martin's Press, 1995. 496 page. Chapter 8 is Environmental Ethics, with two articles: Jan Narveson, "Moral Problems of Population," and Derek Parfit, "On Doing the Best for our Children." Rather strange choices, if there are to be only two articles representing environmental ethics. The editors do not seem to be able to distinguish between environmental ethics and intergenerational ethics. The two 5th edition articles replace Ruth Macklin, "Can Future Generations Correctly be Said to Have Rights?" and Joel Feinberg, "The Rights of Animals and Unborn Generations" in the 4th edition (newsletter v2, #4). Chapter 11 is on animal rights: Peter Singer, "Animal Liberation," and Ruth Cigman, "No Need for Liberation." The suggested reading list is quite inadequate for environmental ethics, mentioning not a single one of the systematic works in the field, and but two of the sixteen anthologies above. Abelson is at New York University; Friquegnon at William Patterson College.

--Cairns, John, Jr., "Ecological Restoration: Replenishing our National Global Ecological Capital." Pages 193-208 in Denis A. Sanders, Richard J. Hobbs, and Paul Ehrlich, eds., *Nature*

Conservation 3: Reconstruction of Fragmented Ecosystems. New York: Surrey Beatty, 1993.

--Fairweather, P. G., "Links between Ecology and Ecophilosophy, Ethics and the Requirements of Environmental Management," *Australian Journal of Ecology* 18 (1993): 3-19. A two-way interaction between ecology and ethics will continue to bear fruit for both disciplines. We need to address fundamental issues of definition and meaning before useful debate can occur in environmental decision-making. Legal requirements of environmental legislation should be met, but we should act more in line with the spirit of the legislation. Science is not paramount in decision-making--psycho-social factors are. Philosophy and ethics offer a wide range of perspectives that can benefit ecology, though, in general, philosophers have listened to ecologists better than ecologists have listened to philosophers. Ecology needs to guide ecophilosophers as to how nature works, why we expect variability in ecosystems, what is natural, and other issues where a scientific understanding of nature has progressed further than many are aware. Fairweather is in the Graduate School of the Environment, Macquarie University, NSW, Australia.

Mark Sagoff, "Four Dogmas of Environmental Economics," *Environmental Values* 3 (1994): 285-310. Four dogmas have shaped modern neoclassical economics. The first proposes that markets may fail to allocate resources efficiently, that is, to those willing to pay the most for them. The second asserts that choices, particularly within markets, reveal preferences. The third is the assumption that people always make the choices they expect will benefit them or enhance their welfare. The fourth dogma holds that perfectly competitive markets will allocate resources to their most beneficial uses. This is the doctrine of "the invisible hand." Sagoff argues that these dogmas of applied welfare economics should be abandoned. One consequence of doing so will be an increased interest in the institutional context of production. A second will be a turn toward empiricism.

Other recently published articles by Sagoff include: "Should Preference Count?" *Land Economics*, 70 (May 1994): 127-44; "Free-Market Versus Libertarian Environmentalism," *Critical Review* 6, no. 2-3 (1993): 211-30; "Environmentalism vs. Value Subjectivism: Rejoinder to Anderson and Leal," *Critical Review* 8, no.3 (1994): 447-67.

Joseph Grange "The Nature of Things," *Journal of Speculative Philosophy*, 8, no. 2 (1994): 97-111.

John E. Carroll and Albert LaChance, eds., *Embracing Earth: Catholic Approaches to Ecology* (Maryknoll: Orbis Books, 1994). A collection of Christian visions attempting to provide valuable, thought-provoking, and inspiring resources with which to confront the global ecological crisis. Contributors include Richard Rohr, William McNamara, David Toolan, and Paula Gonzalez.

--Gregory, Robin, Sara Lichtenstein, and Paul Slovic, "Valuing Environmental Resources: A Constructive Approach," *Journal of Risk and Uncertainty* 7(1993):177-197. Contingent valuation methods for environmental values have been increasingly used in recent years, but much doubt exists about their validity. The authors here argue that the usual form of such surveys puts unreasonable cognitive demands on the person surveyed; they are asked to place monetary value

on goods that are not represented in their minds in monetary form. Such surveys ought not to be thought of as discovering what values the respondent already has, but rather as a means of helping the respondent construct explicitly values that he or she only holds tacitly.

They suggest a new approach, based on the value-structuring capacities of multi-attribute utility theory and decision analysis. The authors are with Decision Research, Eugene, Oregon.

--ColeKing, Adam (Cole-King), "Marine Conservation: A New Policy Area," *Marine Policy* 17 (no. 3, May, 1993):171-185. The ethical bases for marine conservation, as well as background perceptions of the marine environment, as this affects policies, institutions, and implementation. There is no clear ethical or philosophical basis to guide marine conservation. The principal points of contention in environmental ethics are whether the duty to protect the environment is because it is intrinsically valuable or because it provides for human needs. If ecocentrism and enlightened self-interest require the same practical results, the ethical debate is of academic interest only. If not, it is extremely important. The chances are that it is extremely important, since it seems unlikely, based on past performance, that collective self-interest can ever be sufficiently enlightened to preserve all our future environmental options. Cole-King is in the Department of Maritime Studies and International Transport, University of Wales, Cardiff.

--Miller, M. L., and J. Kirk, "Marine Environmental Ethics," *Ocean and Coastal Management* 17(1992):237-251.

--Callicott, J. Baird, "Principal Traditions in American Environmental Ethics: A Survey of Moral Values for Framing an American Ocean Policy," *Ocean and Coastal Management* 17(1992):299-308.

--Murphy, Patrick D., *Literature, Nature, and Other Ecofeminist Critiques*. Albany: State University of New York Press, 1994. 226 pages. \$ 18.95 paper. \$ 57.50 hardcover. A theoretical framework for environmental analysis, developing a conception of environmental literature with an emphasis on works by women. We need to reconceptualize woman/nature and nature/culture associations and to critique problems of the male poetic sex-typing of the planet. There is analysis of the works of Hampl, Harjo, Snyder, and Le Guin, Native Americans, Chicanas, and others. Is agency possible in a postmodern era? Murphy directs the graduate program in literature and criticism at Indiana University of Pennsylvania.

--Chen Denglin and Ma Janzhang, *Outline of Chinese Conservation History* (in Chinese). Harbin, China: Northeast Forestry University Press, 2nd edition, 1993. 173 pages. ISBN 7-81008-292-2. 5.60 Yuan. This book narrates systematically the changing history of the natural environment, of its use as resources and its preservation in the various historical periods of China, from primitive society until 1949 before the People's Republic of China was founded. It traces ideas of exploitation, utilization, and conservation, and also governmental institutions for water resources, land resources, forest and wildlife resources. This is the first systematic work of its kind in China, to be used in school education. Chapter titles: (1) Period of Primitive Society. (2) Period of Hsia, Shang, Western Chou Dynasties. (3) Period of Spring and Autumn, and Warring. (4) Ch'in and Han Periods. (5) Three Kingdoms, Two Tsins, and Southern and Northern Dynasties Period. (6) Period of Sui, T'ang, and Five Dynasties. (7) Period of Sung,

Liao, Kin and YÅan. (8) Period of Ming and Ch'ing. (9) Modern Period. (Thanks to Ye Ping, Northeast Forestry University, Harbin.)  
(China)

--Zhexue Yicong (Philosophy Digest of Translation), a journal of the Chinese Academy of Social Sciences, Institute of Philosophy, Beijing, Issue No. 5, Sept. 1994 (ISSN 1002-8854) contains a section on "Environmental Ethics" in which the following articles are translated into Chinese: (1) W. K. Frankena, "Ethics and the Environment, " (2) Holmes Rolston, "Respect for Life: Can Zen Buddhism Help in Forming an Environmental Ethic? (3) Take- Aki Maruyama (Japan), "Earthly Earth Ethics," and (4) Peter Singer (Australia), "All Animals are Equal." (Thanks to Yu Mouchang, Chinese Academy of Social Sciences.)

--Quammen, David, "Dirge for a Butterfly," *Outside* 19 (no. 11, November 1994):39-42 & ff. But maybe the Uncompahgre fritillary isn't as dead as it seems. The butterfly, endemic to two Colorado mountains, is thought by some scientists to be going extinct naturally, and they argue that we should then do nothing to save it (see Newsletter v.5, #1). The butterfly, which prefers wet, north-facing slopes at 13,000 feet, is a larvae for two years, an adult only for a week, when it is disinclined to colonize new areas. Its habitat is drying out, and there is habitat further north to which it presumably might be moved. Meanwhile, the most recent work on the butterfly, by Amy Seidl of Colorado State University, finds that numbers have somewhat rebounded, possibly because pressures from sheep and collectors have been removed.

--Robbins, Jim, "The Microbe Miners," *Audubon* 96 (no. 6, November-December, 1994):90-95. More on the hunt in Yellowstone for thermophilic bacteria, whose enzymes are proving of great value in the polymerase chain reaction (PCR) techniques used in DNA genetic fingerprinting, a process once sold for \$ 300 million, and now earning \$ 100 million a year. While such technological processes can be protected by patent, the question remains whether any royalties are due to Yellowstone Park, or to the U. S. government, or to anybody, for such prospecting, or whether microbes are a common good. Exobiologists are also interested, since the thermophiles are thought to be similar to primitive forms of life, and what is learned in Yellowstone might be used to detect life in space. Robbins is a Montana environmental writer.

--Montaigne, Fen, "Gorbachev: From Red to Green," *Audubon* 96 (no. 6, November-December, 1994):56-57, 98. Gorbachev, who is president of the newly formed Green Cross International, says the environment is the crucial issue of the post-Communist world.

--Horton, Tom, *Bay Country*. Baltimore: Johns Hopkins Press, 1987.

--Horton, Tom. *Water's Way: Life Along the Chesapeake*. Elliot and Clark, 1993.

--Sagoff, Mark, "Has Nature a Good of Its Own?" Pages 57-71 in Robert Costanza, Bryan G. Norton, and Benjamin D. Haskell, eds., *Ecosystem Health: New Goals for Environmental Management*. Washington, DC: Island press, 1992.

If we are to accept the idea that ecosystems may be objects not only of use but also of aesthetic appreciation and moral attention, then we must accept the possibility that these systems have a good of their own we ought to respect and therefore protect. ... Concepts of ecological health and

integrity ... make the most sense in relation to the intrinsic--the moral and aesthetic--value of ecological communities and systems. Sagoff is at the Institute for Philosophy and Public Policy, University of Maryland.

--Barrows, Paul L., "Wildlife Health: When to Intervene," Transactions of the Fifty-Seventh North American Wildlife and Natural Resources Conference, 1992, pages 433-438. When is intervention appropriate and to what degree in the treatment of wildlife diseases? Some advocate a laissez faire attitude, let nature take its course; but others believe we ought to rehabilitate each sick, injured, or dying wild bird or animal encountered. Reason and practicality lie between these extremes. Examples of intervention are discussed, both at the individual and population level, also reports from organizations and study symposia on this issue. Colonel Barrows is commanding officer of the U.S. Army Veterinary Command with a special interest in the welfare of wildlife on military reservations.

--Gadgil, Madhav and Ramachandra Guha, This Fissured Land: An Ecological History of India. Berkeley: University of California Press, 1992. Part I. A Theory of Ecological History. Part II. Towards a Cultural Ecology of Pre-modern India. Part III. Ecological Change and Social Conflict in Modern India. With much attention to forests, some also to agriculture and wildlife.

--Jansma, Pamela E., Reading about the Environment: An Introductory Guide. Libraries Unlimited.

--BÅhrs, Ton and Robert V. Bartlett, Environmental Policy in New Zealand: The Politics and Clean and Green? New York: Oxford University Press, 1993.

--Vaughan, Ray, Essentials of Environmental Law. Rockville, Md: Government Institutes, 1994. 182 pages. Paper. \$ 42. Good book but considerably overpriced. Federal statutes that limit government and industry action. Natural resource laws. Wildlife laws. State laws and regulations. Toxic torts. How to identify and resolve environmental problems. "In essence, the most fundamental measure of any environmental legal system will be how we human beings view our fellow earthlings and what we are willing to do for them and their survival even when there is no readily apparent corresponding benefit for ourselves. Even in the one law most designed to address the decline of other species, the Endangered Species Act, we have not truly attempted to address what value a species is in and of itself and what value another species may put on us. The fundamental ethics of an honest and open relationship with the Earth, other species, and even our fellow human beings have not been attempted in environmental laws, and so, those laws fail to truly protect the environment and other beings. Consequently, those laws also fail to protect human beings at anything more than a rudimentary level of insuring survival of our species and of insuring the economic vitality of society" (Preface). Vaughan is an environmental lawyer in Alabama. This publisher also publishes state environmental law handbooks to almost all of the states.

--Valente, Christina M., and William Valente, Introduction to Environmental Law and Policy: Protecting the Environment through Law. St. Paul, MN: West Publishing Co., 1994. Chapters on environmental problems, environmental regulation, insecticides, toxic substances, solid waste, superfund, water pollution, air pollution, federal lands, federal facilities, Indian lands. The senior

author is a Senior Assistant Regional Counsel with the Environmental Protection Agency, Philadelphia Region.

--Sibary, Scott and Jane Kerlinger, "Pollution Control and Free Trade," *Illahee: Journal for the Northwest Environment* 10 (no. 3, fall 1994):181- 191. Excellent introduction to the issues of fairness in the free trade environmental regulations debate. Free trade allows unfair competition, if one considers the distribution of harms resulting when national standards of environmental protection differ. A polluting business in a lesser regulated nation can shift the costs of its production onto other persons in that nation, not party to the business transaction, and gain relatively to businesses in regulated (often developed) countries that, owing to environmental regulation, do internalize the costs of pollution. Also, this is market inefficiency. With application to NAFTA and GATT, somewhat dismaying. The authors recommend a scheme of countervailing duties, but they realize the many complexities. A good article to introduce these issues to students, if not to yourself. Sibary is an attorney and professor of management at California State University, Chico. Kerlinger is an engineer in geosciences, also at Chico.

--Thiroux, Jacques P., *Ethics: Theory and Practice*, 5th edition. Englewood Cliffs, NJ: Prentice-Hall, 1995. 577 pages. The first edition was 1977. Chapter 15, the last chapter, is "Environmental Ethics." Key terms. Nature and morality. Our attitude toward nature and what lies behind it. Arguments for use and exploitation of the natural environment. Moderate position. Criteria for animal rights. Ways of dealing with animal rights. Use of animals for food. Use of animals for experimentation. Killing animals for sport. Protection of endangered species. Cases for study. Supplementary reading. A rather brief introduction, perhaps understandable in a text that covers everything, but not particularly penetrating. Bibliography is considerably out of date. Thiroux teaches philosophy at Bakersfield College.

--Norton, Bryan G. and Robert E. Ulanowicz, "Scale and Biodiversity Policy: A Hierarchical Approach," *Ambio* 21 (no. 3, May 1992): 244-249. A hierarchical approach to natural systems, which assumes that small subsystems change according to a faster dynamic than do larger systems of which they are a part, is a useful means to conceptualize problems of scale in determining biodiversity policy. Conservation biology is a normative science that, like medicine, is shaped by a goal of protecting and healing ecosystems. The goal of sustaining biological diversity over multiple human generations implies that biodiversity policy must be set at the landscape level of the ecosystem. Since ecosystems can be described at many levels of organization, conservation biologists must model ecosystems on a scale appropriate to the crucial dynamic that supports the sustainability goal. This dynamic, the autopoietic feature of ecosystems, supports and sustains species across generations. The value of these ecosystem processes is measured as the avoided costs of sustaining species in zoos or highly managed habitats. The protection of the health of these landscape-level processes should therefore be the central goal of biodiversity policy. Norton is in the school of public policy, Georgia Institute of Technology. Ulanowicz is at the Chesapeake Biological Laboratory in estuarine science.

--Norton, Bryan G., "On What We Should Save: The Rule of Culture in Determining Conservation Targets," pages 23-29 in P. L. Forey, C. J. Humphries, and R. I. Vane-Wright, eds., *Systematics and Conservation Evaluation*, The Systematics Association, Special Volume No. 50 (Oxford: Clarendon Press, 1994). No one questions that we have a moral obligation to conserve

biodiversity for future generations, but there is no consensus how to make this operational. There is no objective scientific definition of diversity, since all knowledge is theory-bound, and since natural systems are irreducibly complex. We need a post-modern, post-positivist account.

"Diversity measures are constructs by human individuals who undertake their studies for many different motives." Given certain purposes, hierarchy theory is useful to minimize human alteration of natural systems, focussing on ecosystem health and structures and processes that perpetuate natural systems. Ecological economics is a bridging discipline to link ecology and culture. Norton is in the school of public policy, Georgia Institute of Technology.

--Pister, Edwin P. (Phil), "Desert Fishes: An Interdisciplinary Approach to Endangered Species Conservation in North America," *Journal of Fish Biology (UK)* 37(1990): Supplement A: 183-187. In the 1960' and 1970's, protective legislation and basic research needed for conservation efforts did not exist, and Pister recounts developing these. Desert aquatic communities were among the first to need attention, and an interdisciplinary effort was mounted in an early application of conservation biology. Pister was, until retirement, with the California Department of Fish and Game and remains secretary of the Desert Fishes Council. This whole supplement is the papers from a symposium, "The Biology and Conservation of Rare Fish," held by the Fisheries Society of the British Isles, Lancaster, U.K., July 16-20, 1990.

--Dawson, C P., N. A. Connelly, and T. L. Brown, "Salmon Snagging Controversy: New York's Salmon River" *Fisheries* 18(no. 4, 1993):6-10. In salmon snagging the fisherman jerks a large hook through a pod of fish in hopes of snagging one of them. The authors find four reasons to support such snagging, but seven to oppose it. They don't seem to ask, or know, whether the fish suffer, more or less than if caught in other ways. Many fish and wildlife agencies are attempting to phase out snagging.

--White, R. J., "Why Wild Fish Matter: Balancing Ecological and Aquacultural Fishery Management," *Trout* 33 (no. 4, 1992):16-48. We have built 89 fish hatcheries on the Columbia River alone, costing billions of dollars, and these stock more smolts than ever before. But returns to natal streams continue to decline, spawning runs have dropped from an average of 16 million salmon to one million. Hatchery fish may have disrupted the system through genetic pollution, as wild stocks are swamped with genes from hatchery fish that are not adaptive fits.

--Nordstrom, Karl F., "Intrinsic Value and Landscape Evaluation," *The Geographical Review* 83 (no. 4, October 1993):473-476. The concept of intrinsic value in nature, as developed by philosophers, can provide geographers with a framework for examining both natural and human-altered landscape features in ways that do not appeal solely to human preference or utility. The concept can carry more weight in pragmatic decisions if it is defined and refined so that it retains its original meaning but is approximated by arguments in human terms. Three components of this meaning are: (1) essential or inherent, and not merely apparent, (2) originating or due to causes or factors within a body, (3) being good in itself or desired for its own sake, without regard to anything else. Accounts of intrinsic value, though they make objective reference, will also be of a subjective nature but this does not diminish the usefulness of the concept to geographers as a reference point in assessing changes in a landscape. Nordstrom is in geography and marine coastal science, Rutgers University.

--Nordstrom, Karl F., "The Concept of Intrinsic Value and Depositional Coastal Landforms," *Geographical Review* 80 (no. 1, 1990):68-81. Many recent studies in geography, ecology, and environmental ethics argue the need to manage natural resources in ways that do not appeal solely to human preference or utility. Nordstrom applies the concept of intrinsic value in nature to inanimate objects such as depositional landforms, comparing undeveloped coastal areas with those subjected to human modification. Such features as beaches and shoreline depositional forms can be dynamic landforms that are distinct from their surroundings and have symmetry and harmony, beginnings, endings, cycles with an integrity of place. Humans typically destroy these features with their alterations, but there can be enlightened management practices that respect such intrinsic values. An interesting blending of geography, marine science, and environmental ethics. Nordstrom is in geography and marine coastal science, Rutgers University. Philosophers who think that geographers don't do their philosophical homework should read the two preceding articles, or the next two.

--Henderson, Martha A., "What Is Spiritual Geography?" *The Geographical Review* 83 (no. 4, October 1993):469-472. Following recent books and wide publicity given to the idea of spiritual geography, thought to be a mixed blessing by many geographers, Henderson defines it as a wrestling of one's story out of the circumstances of landscape and inheritance, finding a place that momentarily traps and illuminates the supernatural ability of humans to cherish, adapt, create, and re-create their surroundings. One comes to understand what is holy in the land and in one's relationship to it. This fulfills the human need and ability to legitimize the unknown through the construct of place. "Geographers should not be hesitant to recognize place as a medium to understand human spirituality." Henderson teaches geography at the University of Minnesota-Duluth.

--Lowenthal, David, "Environmental Conflict," *Research and Exploration (National Geographic)* 7(no. 3, Summer, 1991):266-275. Environmental impact issues are highly acrimonious, reflecting deep differences. Fears about species extinction, the greenhouse effect, ozone layer depletion, nuclear and other contaminants lead many to question the fundamental bases of modern entrepreneurial, technological society. We inherit outworn environmental attitudes along with often worn-out environments. The adversarial tone of environmental controversy stems from mounting evidence of the human capacity to destroy or irreversibly damage the biosphere, the complexity and uncertainty of ecological impacts and their global relationships, rising suspicions that government, industry, and even science might be impotent to contain, let alone cure, biosphere destruction. The accusatory polemics, however, make it even harder to respond appropriately to impact analyses that demand action, even if incomplete and provisional. Differing from the past, meanwhile, today all disputants find the notion of the conquest of nature deplorable. Lowenthal is in Geography, University College, London, an emeritus professor.

--Flournoy, Alyson C., "Beyond the 'Spotted Owl Problem': Learning from the Old-Growth Controversy," *Harvard Environmental Law Review* 17(no. 2, 1993):261-332. The author considers at extensive length the claim that there is a "spotted owl problem," (that environmental laws, including those protecting endangered species, are too strong and need to be revised to accommodate human welfare and economic interests), and rejects efforts to weaken or bypass existing laws. Current statutes may, however, be inefficient and risky where legislation intended

for the protection of a single species is used to try to protect ecosystems as a whole, such as old-growth forests. The Endangered Species Act is not the problem its detractors claim it to be. On the contrary, the promotion of economic activities inconsistent with widespread ecological values in the absence of effective laws addressing conservation of land and natural resources is the real problem. The challenge is to adapt the law and economic policy to the reality of important ecological constraints. More and better laws alone cannot resolve the problem, however, since gaps in the laws "partly reflect a struggle to find an agreeable environmental ethic on which to build policy

Only with a clearer ethical vision of appropriate preservation goals can better laws be shaped." Thorough and insightful article. Philosophers who think that lawyers do not do their philosophical homework should read this article. Flournoy teaches law at the University of Florida.

--Meyers, Gary D., "Old-Growth Forests, the Owl, and Yew: Environmental Ethics Versus Traditional Dispute Resolution Under the Endangered Species Act and Other Public Lands and Resource Laws," *Boston College Environmental Affairs Law Review* 18 (1991) 623-668. The owl/old-growth controversy is not really about owls versus people, jobs versus old-growth, environmentalists versus the timber industry, or science versus politics. The issue is about values, what we value, what evidence we need to make decisions, and what methods we use to implement choices. The issue cannot be considered only in terms of human wants and human needs. ... Until we value ecosystems for all the services they perform and express that value in our resource management laws, the owl/old-growth controversy will continue to haunt us.

... If greater recognition of our place in nature is one of the outcomes of revising our values, and if we can achieve greater understanding of our need for others in the natural community, then possibly we can avoid the ... tragedy of the commons. ... We can, with time, move beyond fellowship to communion with our fellow creatures. Meyers is in law, Lewis and Clark College.

--Blumm, Michael C., "Ancient Forests, Spotted Owls, and Modern Public Land Law," *Boston College Environmental Affairs Law Review* 18 (1991) 605-622. Blumm finds notable how effective citizen environmental groups have been in changing national values. They have succeeded in gaining court injunctions that induced Congress to supply increasing statutory protection for ancient forests. This moved the debate out of the control of the Northwest's congressional delegation and made it a national issue. Environmental groups have insisted that the courts enforce the laws, despite a U. S. Forest Service that had often been captured by the timber industry. The agency entrusted with conserving these forests frequently found its own data used against itself in courts. The question of who ought to manage the forest is unsettled. Congress has ultimate authority, but it hardly has the institutional capacity to manage four million acres of remaining old growth forest. Blumm is in law, Lewis and Clark College.

--Varner, Gary, "The Prospects for Consensus and Convergence in the Animal Rights Debate," *Hastings Center Report* 24 (no. 1, 1994):24-28. Those who conduct research on animals and those who advocate on behalf of animals have more in common than is generally supposed. The apparent intransigence of opposing parties is more a function of political posturing than theoretical necessity, and continuing to paint the situation as a standoff serves the interests of

neither side. A critical look at the philosophical bases of the animal rights movement reveals surprising potential for convergence (agreement at the level of policy despite disagreement at the level of moral theory) and, in some cases, consensus (agreement at both levels. Recognizing this should make defenders of animal research take animal rights views more seriously and could refocus the animal rights debate in a constructive way. Varner is in philosophy at Texas A & M University.

--Howard, Walter E., "Animal Research Is Defensible," *Journal of Mammalogy* 74(1993):234-235. A death ethic is essential to nature and animal rights advocates fail to appreciate this. The most important purpose in life for animals, except for trying to breed, is to serve as food to another, usually of a different species. People are an unusually efficient predator and much more humane than nature. They create the lives they destroy, treat them humanely, and replace them with other such lives. There is an ethical right for humans to use animals responsibly in research, for food, as game, and for recreation, as long as unnecessary pain is not inflicted. The killing of wild and laboratory animals can be justified morally and considered a sacred act. Howard is in wildlife at the University of California, Davis.

--Bekoff, Marc, and Ned Hettinger, "Animals, Nature, and Ethics," *Journal of Mammalogy* 75(1994):219-223. A reply to Howard, see above. Howard is unnecessarily combative, lacking in detail, unbalanced, and poorly argued. His vague platitudes do not help in understanding the variety of ethical issues that arise from the diverse uses of animals. For example, nature has no death ethic, nor can nature have one. An ethic that permits any use of animals by humans that causes them less suffering or allows them a longer life than is typical for animals is far too weak. Superficial appeals to nature's brutality to justify the treatment of nonhumans will not do. Bekoff is in biology at the University of Colorado; Hettinger in philosophy at the College of Charleston.

--Rollin, Bernard E., "Animal Production and the New Social Ethic for Animals," *Journal of Social Philosophy* 25 (June, 1994):71-84. Also in *Proceedings of the Mid-America Veterinary Conference*, 1994, pp. 3-11.

--Lemonick, Michael D., "A Terrible Beauty," *Time*, December 12, 1994. Cover story. An obsessive focus on show-ring looks is crippling, sometimes fatally, America's purebred dogs. Fashionable form has been separated from natural function, and these dogs are a genetic mess. Decades of bad breeding have saddled a quarter of America's purebreds with hereditary illnesses that cripple and even kill; the nation's canine establishment is much to blame. (The following article leaves one wondering whether we treat professional football players much better).

--Kimmins, J. P. (Hamish), "Ecology, Environmentalism and Green Religion," *The Forestry Chronicle (Canada)*, 69 (no. 3, June):285-289. Management of forests to optimize the many values there will not be successful if based solely on the science of ecology, because this science cannot tell foresters what their goals should be. There really is no such thing as "ecologically sound" or "ecologically destructive" forest management outside the context of a society's prevailing value judgment system. Management will also fail if based solely on green religion, because this frequently ignores the ecological requirements of many of the living organisms in forest systems.

By "green religion" Kimmins seems to mean beliefs about forest ecosystems that are held contrary to what he thinks is sufficient evidence to the contrary. In any case, foresters need to learn from those Kimmins calls "environmentalists," who have sensitized contemporary society to the diverse values in forests, much better than did ecologists or foresters, but to avoid the blind faith of green religion. Kimmins is in forest ecology at the University of British Columbia.

--Xu, Zhi, "Assessing Distributional Impacts of Forest Policies and Projects," *Evaluation Review* 18 (no. 3, 1994):281-311. Xu develops a model that assesses what he calls "distributional impacts," rather than costs and benefits, or economic impacts, production, and the usual measures. This model integrates monetary and nonmonetary measures of forest policies and projects with attention to who benefits, how much, and optimizing the values carried by forests. Xu is in forest resource policy and economics at the University of Minnesota.

--Shaw, R. Paul, "Warfare, National Sovereignty, and the Environment," *Environmental Conservation* 20 (no. 2, Summer 1993):113-121. A sobering article. Armed conflict does enormous damage to the environment, which may take decades and centuries to recover, if recovery is possible at all. Combined shooting and silent wars cripple the capacity of governments to raise funds for environmental investments and undercut prospects for sustainable development, especially in Third World countries. The enduring relationship between war proneness and nation-building shackles efforts by the international community to protect the global commons. Unfortunately, this runs deep in human nature. The evolutionary process produced, in the interests of ethnic self-defense, a human disposition to nationalism that is largely incompatible with protecting the global commons. For ninety-nine percent of our heritage, protecting the global environment was not a perceived problem. There is some hope, however, in the concept of a homeland, as distinct from that of a nation state, toward which humans do have an innate disposition to care. Perhaps we can come to see Earth as a homeland, or, more realistically, to see how global trends may affect our homelands adversely. This could help to enable diverse peoples to act in concert globally and to protect their environments regionally. Shaw is an economist with the World Bank.

--Burnett, G. W. and Lisa M. Butler Harrington, "Early National Park Adoption in Sub-Saharan Africa," *Society and Natural Resources* 7(1994):155- 168. National parks are widely thought to have begun in Yellowstone National Park in the U.S. in 1872 and to have spread around the world from that inspiration. But parks were adopted early in southern Africa and spread rapidly through much of sub-Saharan Africa. The earliest preservation activities were oriented toward watershed protection and erosion control in fynbos areas. The game reserve orientation of some parks originated later. Burnett is in recreation and tourism at Clemson University, Harrington in geology/geography at Eastern Illinois University.

--Voges, Ian F., "Environmental Management: Implementing the Paradigm Shift," *Global Strategies for Environmental Issues, NAEP 19th Annual Conference Proceedings*. Washington, DC: NAEP (National Association of Environmental Professionals) Publications, 1994, pages 266-276. Environmental managers can only incorporate efficiency under their current management paradigm; they are unable to handle the recent values of sustainability and equity. This will require a new paradigm, one that places cost/benefit analyses in this larger perspective. Voges is in philosophy at the University of Stellenbosch, South Africa.

--Steel Brent S., Peter List, and Bruce Shindler, "Conflicting Values About Federal Forests: A Comparison of National and Oregon Politics," *Society and Natural Resources* 7(1994):137-153. Both national and Oregon publics are more biocentric than anthropocentric in general orientation toward federal forests, though the national public is more strongly biocentric than the Oregon public. A biocentric orientation does not give primacy to human interests but places them in a nature-centered or ecocentric approach. It does not deny that human values are important, but places these in a larger context, finding inherent as well as instrumental value in nature. Among the public, younger persons, women, members of environmental organizations, liberals, and postmaterialists are significantly more biocentric than older persons, men, those economically dependent on timber, conservatives, and materialists. One can predict that biocentric orientations will increase in the future, and agencies that manage resources with traditional anthropocentric orientations, such as the U.S. Forest Service and the Bureau of Land Management, are likely to encounter steadily more resistance from the public. Steel is in political science at Washington State University, Vancouver; List in philosophy, and Shindler in forest resources at Oregon State University.

--diZerega, Gus, "Social Ecology, Deep Ecology, and Liberalism," *Critical Review* 6 (nos. 2-3, 1992):305-370. Extensive critique of Murray Bookchin, representative of left environmentalism, from the author's perspective, which he calls "evolutionary liberalism." This involves an appreciative assessment of deep ecology. Bookchin attempts a social ecology that unites the leftist critique of liberal democratic society with contemporary environmental concerns. His work is undermined, however, in part by the dubious comparisons he makes between market systems and ecosystems, in particular by his failure to understand how these systems operate by impersonal principles of self-organization, combining both cooperation and competition. But the market system, whatever its merits, does promote an instrumental human relation to nature. Free market environmentalism cannot incorporate an appreciation for creatures that have intrinsic value but no instrumental value for human beings, nor for the intrinsic values of things that do have such instrumental value. Deep ecologists are therefore right to criticize the unwillingness of market societies to appreciate the intrinsic value of nature. This can be addressed with an evolutionary liberalism. Here property rights, for example, would be taken up with a sense of stewardship of values in the natural world. The deep ecological principle that should not be compromised is that property rights should reflect not just efficiency in meeting human desires, but also the value of the nonhuman world. We can achieve a harmony between humans and the natural world under the guidance of the rules of self-organizing systems. diZerega is with the Institute of Government Studies, University of California, Berkeley.

--Seligman, Clive, "Environmental Ethics," *Journal of Social Issues* 45 (no. 1, 1989):169-184. The central question is on what ethical basis should we decide how to deal with nature. Is a human centered, utilitarian perspective sufficient to protect the environment? If not, what alternatives are possible? A key philosophical problem is to what extent inherent value can be ascribed to things that are not human: animals, vegetation, and even land. Philosophers do not agree among themselves on these issues. An environmental ethic should explicitly consider whether our behavior toward nature is consistent with our values, that is, consistent with our "best selves." A psychological theory of how humans value may provide some insights into the way we think about ethical dilemmas. As our personal values deepen, we will be increasingly

inclined to do the right thing environmentally. Seligman is in psychology at the University of Western Ontario.

--Swanson, Timothy M., and Edward B. Barbier, eds. *Economics for the Wilds: Wildlife, Wildlands, Diversity and Development*. London: Earthscan, 1992. 226 pages. \$12.95, paper. The only way to save wildlife is to make it economically profitable to save them. The reason wildlife is now under threat is that there are so few economic incentives; the vast majority of species are refugees of the international economic system. Unless we find ways of integrating these wild values into the economic system, wildlife and wildlands face a bleak future. They cannot be saved in peopleless parks. Unfortunately, the largest reserves of biological diversity lie in some of the poorest countries of the world, and it is neither fair nor prudent to ask developing countries to preserve wildlands, especially when the developed countries have destroyed theirs. The contributors suggest new ways of making wildlife and wildlands count economically. Bruce Aylward, "Appropriating the Value of Wildlife and Wildlands" argues, however, that there are some aspects of biodiversity that cannot be brought into economic arguments. Questions of our moral obligations to nonhuman species are given scant treatment here; most of the authors hold that such moral arguments are likely to be increasingly flimsy in the face of overwhelming population pressures and the inequitable trading relations and development patterns between North and South.

--Schroeder, Christopher H., "Rights Against Risks," *Columbia Law Review* 86(1986):495-562. Through "Do no harm" is a basic duty, we permit technology that puts persons at risk, for example by environmental pollution. The realities of modern technology mean that we must permit some risky action, imposed on individuals who have not consented to it, and also unintentional in the objectives sought by the corporation involved, through action that raises the probability of harm for many and does in fact result in injuring, sometimes killing statistical persons. This can be consistent with a concept of rights that places the utmost importance on the sanctity and autonomy of individuals. "A blunt lesson emerges from this analysis: certain risks can be imposed justifiably on others" (p. 553). "Some nonzero level of risk will almost certainly be taken to be acceptable because of the substantial adverse consequences attendant to any more severe levels of risk prevention" (p. 562). Schroeder is professor of law, Duke University.

--Eckersley, Robyn, "Free Market Environmentalism: Friend or Foe?", *Environmental Politics* 2(1993):1-19. "Free market environmentalism" proposes that environmental problems can be solved by creating and enforcing tradeable property rights in respect of common environmental assets. But while the market can allocate resources efficiently, it cannot by itself perform the task of setting an optimal (in the sense of just) distribution of income nor an optimal (in the sense of sustainable scale) of the economy relative to the ecosystem. There are certain specific environmental problems where "free market environmentalism" may prove to be the most appropriate solution (it can, for example, promote energy efficiency through market mechanisms), but it is inappropriate as a blanket solution to the ecological crisis. This calls for economic policies concerned with three broad goals: economic efficiency, social justice and ecological sustainability. Eckersley is in politics at Monash University, Australia.

A useful response by Michael Jacobs (University of Lancaster, UK) is in the Winter 1993 issue, vol. 2, no. 4.

--Duffus, David A., and Philip Dearden, "Recreational Use, Valuation, and Management of Killer Whales (*Orcinus orca*) on Canada's Pacific Coast," *Environmental Conservation* 20 (no. 2, Summer):149-156. Killer whales are among the most spectacular of all animals to see in the wild, and recreational watching of them has increased dramatically. The authors analyze surrounding issues: the experiences people have, economic benefits to communities, possible harassment of the whales, management issues, and whether the Canadian experience can be a model for whale and dolphin watching elsewhere. The authors are in geography at the University of Victoria, British Columbia.

--Hunter, Malcom L., Jr., "Natural Fire Regimes as Spatial Models for Managing Boreal Forests," *Biological Conservation* 65(1993):115-120. Conservationists often think that humans, in harvesting a resource, ought to mimic natural regimes, and therefore imitate nature as much as possible. But in boreal forest ecosystems in Canada, which were shaped by crown fires that destroyed and replaced large areas, this would mean timber harvesting, mimicking fires, in quite large clearcuts that environmentalists are reluctant to advocate. Perhaps moderate sized clearcuts clustered into portions of land areas bounded by water bodies is a solution. Hunter is in forest resources, University of Maine.

--Castle, Emery N., "A Pluralistic, Pragmatic and Evolutionary Approach to Natural Resource Management," *Forest Ecology and Management* 56(1993):279- 295. Four requirements must be satisfied by natural resource management. (1) It must provide for economic and social change, especially true in modern societies. (2) It must recognize the interdependence of humans and the natural environment. (3) The welfare of future generations must be considered. (4) The process by which group decisions are made is critical. Castle reaches three conclusions: (1) No single environmental ethic or philosophical system exists nor is one likely to be discovered that will guide environmental policy, though several philosophical approaches help. Natural resource policy is necessarily pluralistic. (2) Pluralism is not an acceptable comprehensive system because it does not forbid inconsistencies. For this reason policy must be pragmatic, and democracy is a pragmatic device. (3) Social and natural systems co-exist through time and must mutually adapt, though neither is stable or predictable far into the future. Castle teaches economics at Oregon State University.

--Tausch, Robin J., Peter E. Wigand, and J. Wayne Burkhardt, "Viewpoint: Plant Community Thresholds, Multiple Steady States, and Multiple Successional Pathways: Legacy of the Quaternary?," *Journal of Range Management* 46(1993):439-447. Ecological theory that has been the basis of vegetation management for most of this century is now being questioned. The legacy of Quaternary climate change is that plant communities are far less stable than they appear to be from our perspective (at least in the U.S. West). They are unique at each location, difficult to define, and communities that are relics from a previous environment can be sensitive to small or transient environmental changes. Many ecological principles and concepts, and ecosystem paradigms derived from them, require revision to incorporate this variation. Plants adapt to climate change as much by migrating as by genetic adaptation. In ecosystems, various plants are entering and leaving at various times. Many ecosystems have no one steady state, many can follow multiple successional pathways, often depending on small changes at threshold points. This calls for more hands on management and more managerial decisions about the routes

preferred, since there is no one natural state to be preferred. Tausch is at the US Forest Service Intermountain Research Station, Reno, Nevada, and Wigand and Burkhardt are at the University of Nevada.

--Reice, Seth R., "Nonequilibrium Determinants of Biological Community Structure," *American Scientist* 82(1994):424-435. Biological communities are always recovering from the last disturbance, their "normal" state. Natural systems are so frequently disturbed that equilibrium is rarely achieved. On the other hand, disturbance is scale dependent. If the area studied is large enough, all disturbances are predictable and "normal." If a disturbance is predictable, the biota can and will adapt to it; a disturbance that is unpredictable will have a greater impact. Disturbance and heterogeneity, not equilibrium, generate biodiversity. Disturbance should be viewed as both natural and beneficial to the world's biodiversity. We need to value, nurture, and preserve our planet's biodiversity. Understanding that heterogeneity and disturbance are important contributors to biodiversity will help us achieve these goals. Reice is in ecology at the University of North Carolina, Chapel Hill.

--Hampicke, Ulrich, "Ethics and Economics of Conservation," *Biological Conservation* 67(1994):219-231. Nature can be valued in its own right or as an instrument for the benefit of humankind. The second valuation, although less fundamental from a philosophical point of view, is sufficient to substantiate conservation as a moral duty. The harm done to future generations in burdening them with an ecologically impoverished world cannot be justified by the moral standards of a civilized society when we consider the fact that conservation costs are not excessive. Even from a purely anthropocentric point of view it is logically impossible to assess the full monetary value of an irreversibly lost ecological asset. However, monetarization is possible within a limited scope. Many such studies in Germany show that conservation costs are low in terms of the benefits received. A good summary of the mix of philosophy, ethics, and economics, with applications to Germany. Hampicke is in the Department of Economics, Gesamthochschule/Universität Kassel, Germany.

--Booth, Douglas E., "Ethics and the Limits of Environmental Economics," *Ecological Economics* 9(1994):241-252. There are limits to the cost-benefit framework, given the acceptance of an ethic of environmental concern. Two approaches to environmental ethics are considered: one based on the view that humans are the focus of moral concern, the other holding that moral concern ought to be extended to the nonhuman world. In the first case, cost-benefit analysis can legitimately be applied so long as those humans who suffer losses from environmental damage are adequately compensated. But even in human cases, the application of cost-benefit analysis is inconsistent with the moral considerability of humans in cases where damage is harmful to human health and also in cases where the natural environment is so highly valued that the compensation of damaged parties is infeasible. In the second case, cost-benefit analyses cannot legitimately be applied where nonhuman entities are morally considerable. Booth teaches economics at Marquette University. Any philosopher who thinks that economists do not do their philosophical homework should read the preceding three articles.

--Thompson, Jr., Barton H., "Judicial Takings," *Virginia Law Review* 76(1990):1449-1544. More than you ever wanted to know about "takings" legislation and history, also a good introduction to a topic of increasing interest in environmental conservation. Thompson concludes

that takings jurisprudence is quite muddled, and variously applied in legislative, administrative, and judicial branches of government. The concept of private property has undergone steady change in recent decades and courts are often disinclined to intervene when government uses its power to limit the permissible actions of private property holders, as, for instance, in environmental regulations. Burton is at the Stanford Law School.

--Ariansen, Per, "Anthropocentrism with a Human Face," *Opuscula* (published by the Examen Philosophicum Section of the Department of Philosophy, University of Oslo), Fall 1994. In English. Ariansen argues for an anthropocentric environmental ethic that finds it morally blameworthy to mistreat animals, although direct moral obligations are towards humans. We could not act morally directly towards plants or animals even if we very strongly wanted to. Sentient animals are, as far as we know, in a position where they are unable to see wilfully inflicted pain as different from any other occurrence of pain. It is therefore simply impossible to offer ethics to animals. They will not be able to understand what they are being offered. It is impossible to morally offend an animal, though clearly it is possible to inflict pain on them and in manners that morally offend humans. Duties toward animals are in reality duties towards ourselves, though the way this is so is often misunderstood. We ought to have respect for the pain of others even if it is clear that the patient will never discover that the pain or loss inflicted had a human origin. The morally relevant relationship between humans and non-humans is essentially dependent upon the scheme of morality as it unfolds in inter-human society. Although this scheme centers around the autonomy of the moral agent, it nevertheless presupposes a respect for the suffering of others, since in a world without suffering, lying and cheating would have no moral significance. A deep respect for the suffering of others imposes on humans a limited prima facie commitment also to animal welfare. Some case can also be made that the destruction of non-sentient and non-animate nature, such as a crystal, can be analogously treated. Ariansen teaches philosophy at the University of Oslo and is the author of *Miljøfilosofi: En Innføring* (Environmental Philosophy: An Introduction). Ariansen also has two forthcoming papers: (1) "Sustainability, Morality and Future Generations," given at a conference in Kyoto, Japan, sponsored by the Future Generation Alliance Foundation and the Kyoto Forum. (2) "Beyond Parfit's Paradox," prepared for the October 1994 conference, "Our Responsibilities toward Future Generations," held in Malta. Copies on request: Per Ariansen, Filosofisk Institutt, Universitetet i Oslo, Boks 1020, 0315 Blindern, Oslo, Norway. FAX: (+47) 22 85 75 51

--Langhelle, Oluf, and Ornulf Seippel, "Norsk miljøfilosofi, en basis for en alternativ ideologi: Sigmund Kvaloy Satereng," *Tidsskrift for Alternativ Framtid* (The Norwegian) Journal for an Alternative Future), no. 2, 1993. One in a series of philosophically relevant articles presenting profiles in Norwegian environmental philosophy, this one presenting and discussing Satereng's ecophilosophical platform, with a response by Satereng in the subsequent issue. Satereng is a farmer-writer-lecturer in Norway who has developed a variety of deep ecology drawing on Mumford, Bergson, Whitehead, and Naess, a strong critic of the industrial growth society. Langhelle and Seippel are research fellows at the Alternative Futures Project, Oslo.

--Langhelle, Oluf, and Ornulf Seippel, "Norsk miljøfilosofi, en basis for en alternativ ideologi: Arne Naess" *Tidsskrift for Alternativ Framtid* (The Norwegian) Journal for an Alternative Future), no. 3, 1993. An analysis of Arne Naess's deep ecological platform.

--Ariansen, Per, "Hegelianismen i norsk miljødebatt," *Tidsskrift for Alternativ Framtid* (The Norwegian) Journal for an Alternative Future), no. 3, 1994. An analysis of Hjalmar Hegge's environmental philosophy. Hegge is a Norwegian influential for two decades in the public debate on environmental issues, drawing on Rudolf Steiner and Johann V. von Goethe, and offering a critique of industrial society.

--Naess, Arne, "Helhetssyn, grønne kulturer og den økologiske krisen" ("Holism, Green Cultures and the Ecological Crisis). *Tidsskrift for Alternativ Framtid* (The Norwegian) Journal for an Alternative Future), no. 4, 1994.

--Skirbekk, Gunnar, ed., *The Notion of Sustainability and its Normative Implications*. Oslo: Scandinavian University Press, 1994. 193 pages. Six articles, all in English: Michael Ruse (Philosophy, University of Guelph), "Sustainability"; Jorgen Randers (Economics, Norwegian School of Management, Oslo), "The Quest for a Sustainable Society--A Global Perspective"; Peter B. Sloep (Biology, Dutch Open University at Heerlen), "The Impact of 'Sustainability' on the Field of Environmental Science"; Kristin Shrader-Frechette (Philosophy, University of South Florida), "Sustainability and Environmental Ethics"; Gunnar Skirbekk, "Ethical Gradualism, beyond Anthropocentrism and Biocentrism?"; Georgios Anagnostopoulos (Philosophy, University of California, San Diego), "Sustainability and Ways of Achieving It." The authors claim to defend a "reasonable radicalism," avoiding the Scylla of soft eco-holism and the Charybdis of shortsighted scientism. Skirbekk is in philosophy at the University of Bergen.

--Grumbine, R. Edward, *Environmental Policy and Biodiversity*. Washington, DC: Island Press, 1994. 416 pages. 21 articles. \$ 22.00 paper. \$ 45.00 hardbound. Four parts: Conservation Biology: Theories and Principles for Policy and Management; Toward a Common Law of Ecosystem Management; Applying Conservation Biology in the Real World: Case Studies; Conservation Science, Politics, and Policy-Making. Sample articles: Michael Soulé and Daniel Simberloff, "What Do Genetics and Ecology Tell Us about the Design of Nature Reserves?"; Daniel J. Rohlf, "Six Biological Reasons Why the Endangered Species Act Doesn't Work--and What to Do about It"; Susan MacKenzie, "Great Lakes Intergovernmental Cooperation: A Framework for Endangered Species Conservation"; Donald Ludwig, Ray Hilborn, and Carl Walters, "Uncertainty, Resource Exploitation, and Conservation: Lessons from History." Grumbine is director of the Sierra Institute, University of California Extension, Santa Cruz.

--Orr, David W., *Earth in Mind: On Education, Environment, and the Human Prospect*. Washington, DC: Island Press, 1994. \$ 16.95 paper; \$ 29.95 hardcover. "Educators must become students of the ecologically proficient mind and of the things that must be done to foster such minds. In time this will mean nothing less than the redesign of education itself." These essays, previously published, are here gathered and compounded in their power to provoke and to stimulate thinking about the role of the college and university in teaching ecological literacy. Sample chapters: What is Education for? The Dangers of Education. Rating Colleges (as environmental models and for teaching environmental responsibility). Agriculture and the Liberal Arts. Love It or Lose It: The Coming Biophilia Revolution. A World That Takes Its Environment Seriously. Prices and Life Exchanged: Costs of the U.S. Food System. Refugees or Homecomers? Conjectures About the Future of Rural America. Orr directs environmental studies

at Oberlin College.

--Lea, John P., "Tourism Development Ethics in the Third World," *Annals of Tourism Research* 20(1993):701-715. The origins of ethical concern about tourism development in the Third World are traced in both the sociology of development and the environmental ethics literature. New secular and religious writings single out the traveller and the tourism industry as objects of ethical concern. Lea attempts a preliminary overview of the growing "responsible tourism" and travel ethics literature and explores the significance of anti-tourism activity in the Indian State of Goa. He suggests a three-part grouping into Third World development ethics, tourism industry ethics, and personal travel ethics. "It is certain that tourism ethics in general and environmental ethics in particular will become an important subdiscipline within tourism studies in the near future." Lea teaches architecture at the University of Sydney, Australia.

--Burton, Ian and Peter Timmerman, "Human Dimensions of Global Change--A Review of Responsibilities and Opportunities," *International Social Science Journal* 41(1989):297-313. "Ordinary human interactions with the environment are entering a new stage that calls for an extraordinary response." "As we now enter the era of global change, a new relationship has to be forged between human society and environment, which will be morally, economically and ecologically sustainable." "A new environmental ethic and a coalition of reason will be needed." "The moral solidarity of humankind must continue to grow." The authors are in geography, International Federation of Institutes for Advanced Study, Toronto. This whole journal issue is on the theme: Reconciling the Sociosphere and the Biosphere: Global Change, Industrial Metabolism, Sustainable Development, Vulnerability.

--Repetto, Robert, compiler, *The "Second India" Revisited*. Washington, DC: World Resources Institute, 1994. \$ 14.95 paper. 90 pages. A study produced by a team of nine Indians and others. The "Second India" is the near doubling of the population of India in the last twenty years. The much-admired green revolution in agriculture, coupled with a quadrupling of the rate at which contraceptives are used, has enabled India to do little more than mark time in per capita food production in the last twenty years. Though parts of India, where women have better education and higher status, have reduced births to the replacement rate, in much of India the rate is over five births per woman. Population is still increasing, and India's population is projected to exceed that of China in the next century. There is no foreseeable method of continuing the green revolution to feed such population growth. Also, the increased food production has come at considerable environmental degradation. Repetto is a senior economist at the World Resources Institute.

--MacLeish, William H., *The Day Before America*. Boston: Houghton Mifflin, 1994. 278 pages. \$ 21.95. What the condition of the continent was before the Europeans got their hands on it. The land was changing geologically and ecologically even before the first human inhabitants from Asia arrived, some 25,000 years ago. The first inhabitants were not shy about altering whatever they could, but they were few (average density about 11 persons per 100 square kilometers) and were pikers in what they could do compared with the sophisticated ecological savagery of the Europeans who came after them.

Concludes with a chapter on the "native sense" of place.

--White, Richard, "Native Americans and the Environment," in W. R. Swagerty, ed., *Scholars and the Indian Experience: Critical Reviews of Recent Writing in the Social Sciences*, pp. 179-204. Bloomington: Indiana University Press, 1984. A critical summary and review of over a hundred works in the field.

White is at the University of Utah.

--Blum, Deborah, *The Monkey Wars*. New York: Oxford University Press, 1995. 306 pp. \$ 25. Traces the history of the conflicts over primate experimentation and research. Blum seeks a middle ground where both human and animal lives count, and where we can honestly and calmly ponder the pain/gain equation, how much pain we are willing to inflict to reduce human pain. She finds, for instance, that there will probably be no vaccine for AIDS found without primate research. Blum is a science writer for the *Sacramento Bee* who received a Pulitzer Prize for an earlier series of newspaper articles on this subject.

--Marquis, Robert J., and Christopher J. Whelan, "Insectivorous Birds Increase Growth of White Oak through Consumption of Leaf-Chewing Insects," *Ecology* 75(1994):2007-2014. The authors find that insect-eating birds substantially reduce the insects that eat tree leaves, and thus, by regulating insects, substantially increase the growth of oaks. The research suggests that the migrating songbirds that (used to) fill the North American forests each spring are not simply decorative frills playing some minor role in the ecosystems, but that they play a crucial role in maintaining the health and productivity of forest trees. But such birds, unfortunately, have been in recent decline. Marquis is in biology at the University of Missouri-St. Louis. Whelan is at the Morton Arboretum, Lisle, Illinois.

--Vitousek, Peter M., "Beyond Global Warming: Ecology and Global Change," *Ecology* 75(1994):1861-1876. Three well-documented global changes are: increasing carbon dioxide in the atmosphere; alterations in the global nitrogen cycle; and ongoing land use/cover change. The carbon dioxide increase since 1800 is unique in the past 160,000 years, and likely to have climatic consequences and direct effects on biota in all Earth's ecosystems.

More nitrogen is fixed annually by humans (primarily for fertilizer, also by legume crops and as a byproduct of fossil fuel consumption) than by all natural pathways combined. This alters aquatic ecosystems, contributes to eutrophication of the biosphere, and affects biological diversity. Land use has transformed one-third to one-half of Earth's ice free surface, with major effects even on otherwise pristine areas downwind and downstream.

There is little uncertainty that serious changes are impending. Ecologists should speak out to help effective discussion about what can and should be done. Vitousek is in biology at Stanford University.

--Klyza, Christopher McGrory, and Stephen C. Trombulak, eds., *The Future of the Northern Forest*. Hanover, NH: University Press of New England, 1994.

270 pages, \$ 19.95, paper. \$ 45 cloth. Essays from a variety of academics and environmental and

political activists involved in the two major studies of the 25 million acres of northern forests at stake: the Governors' Task Force on Northern Forest Lands and the Northern Forest Lands Study.

--Fleischner, T. L., "Ecological Costs of Livestock Grazing in Western North America," *Conservation Biology* 8(1994):629-644. About 70% of the eleven U.S. Western states are currently grazed, all types of ecosystems, the most widespread land use practice. There are a host of negative repercussions: reduced densities and biomass of many plant and animal species, reduced biodiversity, spread of exotic species, spread of introduced wildlife diseases, interrupted ecological succession, impeded cycling of the most important nutrient, nitrogen, changed habitat structure, disturbed community organization, especially of riparian areas. Fleischner is in environmental studies at Prescott College, Arizona. This research paper grounds the Society for Conservation Biology, Position Statement on Livestock Grazing," *Society for Conservation Biology Newsletter* 1 (no. 4, November, 1994):2-3.

"The ecological evidence is clear that livestock grazing must be drastically reduced in the American West."

--*Journal of Forestry*, "Ethical Decisionmaking: A Roundtable Discussion," vol. 91, no. 4, April 1993. Contains: Banzhaf, William H., "Rarely Black and White" Irland, Lloyd C., "Developing Ethical Reflection" Marshall, Fred, "Ethical Priorities" Coufal, James E., and Zane J. Cornett, "The Ethics of Forest Stewardship" The issue theme is "Environmental Ethics and Policies: Assessing the Benefits and Consequences."

--Thompson, Richard P., "Compensated Takings and Negotiated Solutions," *Journal of Forestry* 91 (no. 4, April 1993):14-18. The author claims that increased regulations of what private landowners may and may not do on their forest lands amounts to partial takings, and finds that courts are increasingly recognizing this, although they still lean too much to extend police powers protecting from harm in environmental cases. There is a limited ability of regulatory law to impart respect and stewardship for natural resources; one cannot legislate morality. Landowners must be given incentive. One simple method is to compensate landowners for legitimate losses from takings due to environmental regulation. But one should also view landowners as partners with society in conservation and negotiate with them directly on mutual issues. Thompson is in natural resource management, California Polytechnic State University, San Luis Obispo.

--Barlow, R. M., "Buber Looks at Nature: An Alternative Epistemology," *Contemporary Philosophy* 12 (no. 10, July, 1989):5-11. Martin Buber's alternative, dialogic existential epistemology counters the subject-object thrust of traditional epistemologies.

--Risk, Paul, "Death, Suffering, Predation, Animal Rights and Interpretation," *Journal of Interpretation* 14 (no. 1, 1990):R-12-R-15.

Suffering and death are part of the natural scheme of things, but pose a difficult problem to the environmental interpreter, especially when dealing with children, or with "bleeding hearts." We ought to incorporate honesty, entirety, and moral implications into environmental interpretation.

Risk teaches parks, recreation, and tourism at the University of Maine.

--Strassman, Judith A., and Sam H. Ham, "Interpreting Controversial Species: A Case Study and Principles" (The Grizzly Bear), *Journal of Interpretation* 14 (no. 2, 1990):7-9. Present the facts. Dispel myth and misinformation. Cultivate a respect and appreciation for the grizzly bear as an endangered species. Develop credibility and public trust in the federal and other agents involved. Be open-minded about all sides of the issue. With details of how the authors applied this to the conservation of the bears. Strassman and Ham are in the College of Forestry, Wildlife and Range Sciences, University of Idaho.

--Tobias, Michael and Georgianne Cowan, eds., *The Soul of Nature: Visions of a Living Earth*. New York: Continuum, 1994. 299 pages. 32 contributions on spirit and nature. Part I. Earth Sapiens (sense of place), including Gretel Ehrlich, "Island"; Annie Dillard, "Tinker Creek.: Part II. For the Love of All Animals, including Barry Lopez, "Apologia"; Joel Monture, *The Boy Who Lived with the Bears.*" Part III, *Living Every Day*, including Wendell Berry, "People, Land, and Community"; David Steindl-Rast, "Belonging to the Universe." Part IV: *The Future of Nature*, including Petra Kelly (German woman, co-founder of the Green Party, who was mysteriously murdered in 1992), "Creating an Ecological Economy"; B. D. Sharma, "On Sustainability"; and many more. Tobias is an author and film producer, including the miniseries, *Voice of the Planet*. Cowan is director of the Spirit and Nature Program at the Earth Trust Foundation.

--Bruggeman, Walter, *Using God's Resources Wisely: Isaiah and Urban Possibility*. Louisville, KY: Westminster/John Knox Press, 1993. 89 pages, paper. Six studies in the prophet Isaiah, addressed to a growing awareness of the environmental crisis and how it relates to social relations especially in urban settings. Isaiah's prophecies are an artistic- theological history of the city of Jerusalem--a case study of urban environmental crisis that resulted from a lost sense of covenantal neighborliness. There are alarming parallels in today's urban crises. Ecological degradation, consumerism, and resource depletion are essentially urban problems, and urban power, anxiety, and greed reach into non-urban places to destroy the rural and wild places, as well as to undermine the city's own life support. Bruggeman teaches Old Testament at Columbia Theological Seminary, Decatur, Georgia.

--Edwards, Denis, *Made from Stardust: Exploring the Place of Human Beings Within Creation*. North Blackburn, Australia: Collins Dove, 1992. 81 pages. \$ 9.00. Edwards, a Roman Catholic priest of the Archdiocese of Adelaide Australia, begins with a meditation on an Australian aboriginal story that provides insight into the interconnectedness of the universe as a whole, and develops a Biblical account that moves away from an anthropocentrism that sees the world as given for humanity's use alone. This is related to evolutionary science, as well as to astrophysics. He closes with a plea for social justice and the well-being of the planet based on the integrity of creation. Edwards lectures in systematic theology in the Adelaide College of Divinity.

--Meilaender, Gilbert, "Terra es animata: On Having a Life," *Hastings Center Report* 23(no. 4, 1993):25-32. The contemporary concept of the person, dominant in bioethics, has lost the connection between our person and the natural trajectory of the bodily life, a strange upshot for bioethics. Premodern Christians knew persons as terra animata, animated earth. Persons are

inseparable from the growth, development, and decline of their bodies. The humanist, Enlightenment concept of the person overlooks this and finds the essence of personality in rational autonomy, without which the organic body lacks all value. Among the peculiarities of our historicist and purportedly antiessentialist age is the rise to prominence of an ahistorical and essentialist concept of the person. On this view it is not the natural history of the embodied self but the presence or absence of certain transnatural capacities that makes the person. The so-called materialistic age ironically holds that everything central to our person is separated from the body. But to have a life is to be *terra animata*, a living body whose natural history has a trajectory. Every human life has a narrative quality, one that begins before we are conscious of it and may, in our decline, continue for a time after we have lost consciousness of it.

This is relevant for how we interpret living wills. Also medical suicide, when a person takes rational, autonomous control over the circumstances of one's death, can elevate the cerebral over the biological dimensions of life. Meilaender is in religion at Oberlin College.

--Cohen, Warren, ed., *Ethics in Thought and Action: Social and Professional Perspectives*. New York: Ardsley House, Publishers, 1995. 318 pages. Section 6 is "Ethics and the Environment," and contains a section on acid rain and one on Lao Zi and the *Dao de Jing* (sic), nothing else, a somewhat curious combination as an introduction to environmental ethics in thought and action. Cohen is in philosophy at the University of Hawaii at Manoa.

--O'Laughlin (O'Laughlin), Jay, James G. MacCracken, David L. Adams, Stephen C. Bunting, Keith A. Blatner, and Charles E. Kegan, III, *Forest Health Conditions in Idaho*. Moscow, ID: University of Idaho, College of Forestry, Idaho Forest, Wildlife and Range Policy Analysis Group, Report No. 11, December 1993. (Phone 208/885-5776, FAX 208/885-6226) 244 pages. An executive summary is available, 37 pages. If forest health is a statement about trees at risk of mortality from insects, disease, and wildfire, then much of Idaho's forest land is either unhealthy or on the verge of poor health, especially in the national forests that represent two-thirds of the state's timberlands. Firs are the most prevalent trees in Idaho's forests, which were predominantly pines before European settlers arrived in Idaho.

Firs are less resistant than pines to many insects and diseases as well as wildfire. Prolonged drought in southern Idaho has weakened forests, making them even more susceptible to insect epidemics and wildfires. In northern Idaho, root diseases are affecting the growth potential of mature stands. In forests throughout the state, environmental, ecological, economic, and social values are at risk. The situation can be changed by using forest management practices favoring pines instead of firs and reducing competition between trees by thinning, while protecting other forest values. Two obstacles to this course of action are public policy and public trust. The report is philosophically interesting for its discussion of forest health, and reveals many limitations of this metaphor as applied to forests.

A tree (like a person) is not healthy when it dies, but is a forest unhealthy when its trees age and die? Or burn? Or are beset with insect blights? The renewal and regenerative processes in a forest system have no clear analogue in bodily health. The report concludes that forest health is significantly a cultural construction. O'Laughlin is Director of the Policy Analysis Group, and teaches natural resource policy at the University of Idaho.

--Kolb, T. E., M. R. Wagner, and W. W. Covington, "Concepts of Forest Health: Utilitarian and Ecosystem Perspectives," *Journal of Forestry* 92(no. 7, July 1994):10-15. Health is a metaphor for forest condition at the landscape level, borrowed from its primary use with individual organisms, and the extension is sometimes problematic. There are two main approaches: (1) Utilitarian health. The forest has few pests or pollutants, with biotic conditions for growth to meet management objectives. (2) Ecosystem health.

The forest has the physical environment, biotic resources, and trophic networks to support productive forests during at least some seral stages; there is a functional equilibrium between supply and demand of essential resources (water, nutrients, light, growing space); there is a diversity of seral stages and stand structures that provide habitat for many native species and all essential ecosystem processes. Forest health needs to be scaled, from trees to ecosystems. A healthy forest will contain numerous unhealthy and dying trees. Mistletoe, a pest that makes a ponderosa pine forest unhealthy on the utilitarian definition, increases the diversity of bird species in the forest and enriches the community. The authors are in the School of Forestry, Northern Arizona University. This whole issue of the *Journal of Forestry* is on forest health.

--Baldwin, A. Dwight, Judith deLuce (de Luce), and Carl Pletsch, eds., *Beyond Preservation: Restoring and Inventing Landscapes*. Minneapolis: University of Minnesota Press, 1993. Sample articles: Baldwin, de Luce, and Pletsch, "Ecological Preservation versus Restoration"; William R. Jordan, III, "'Sunflower Forest': Ecological Restoration as the Basis for a New Ecological Paradigm"; Frederick Turner, "The Invented Landscape" (we ought, "when the occasion warrants and the knowledge is sufficient, to create new ecosystems, new landscapes, perhaps even new species" (p. 36); G. Stanley Kane, "Restoration or Preservation: Reflections on a Clash of Environmental Philosophies"; Carl Pletsch, "Humans Assert Sovereignty over Nature"; Dora G. Lodwick, "Changing Worldviews and Landscape Restoration."

Baldwin is in geography, de Luce teaches classics, and Pletsch history at Miami University.

--Huston, Michael A., *Biological Diversity: The Coexistence of Species on Changing Landscapes*. New York: Cambridge University Press, 1994. 681 pages. A state of the art survey of what is known in the field. Huston is an ecologist at Oak Ridge, Tennessee.

--Kauffman, Stuart A., *The Origins of Order: Self-Organization and Selection in Evolution*. New York: Oxford University Press, 1993. A summary is: "Antichaos and Adaptation," *Scientific American* 265(no. 2, August 1991):78- 84. Since Darwin, biologists have seen natural selection as virtually the sole source of that order. But Darwin could not have suspected the existence of self-organization, a recently discovered, innate property of some complex systems. It is possible that biological order reflects in part a spontaneous order on which selection has acted. Selection has molded, but was not compelled to invent, the native coherence or ontogeny, or biological development. We may have begun to understand evolution as the marriage of selection and self-organization. Natural selection may drive ordered systems to the edge of chaos because that is where the greatest possibility for self-organization, and survival in changing environments, occurs. Kauffman is professor biochemistry and biophysics at the University of Pennsylvania School of Medicine.

--Loy, David, "Indra's Postmodern Net," *Philosophy East and West* 43 (no. 3, 1993):481-510. Indra's net, a cosmological metaphor in Buddhism, with its myriad jewels each reflecting each other, symbolizes an infinitely repeated interrelationship among all the members of the cosmos. There is no beginning, no creator, no purpose, no hierarchy, no center, no privileged point, only interpenetration and mutual identity. This has ecological ramifications that fit surprisingly well with contemporary poststructuralist philosophy--critiques of self-existence and self-presence, a suspicion about the theological quest for Being, an emphasis on groundlessness, the deconstruction of any transcendental significance, the rejection of truth with a capital T. Although there are differences, there are remarkable parallels between an ancient philosophical system and one of the most provocative developments in modern thought. Buddhism has something to offer a rationalized, technologized world that is rapidly devouring what remains of its own spiritual roots. Loy is in international studies at Bunkyo University, Kyoto, Japan.

--Rue, Loyal, *By the Grace of Guile: The Role of Deception in Natural History and Human Affairs*. New York: Oxford University Press, 1994. With a chapter extensively detailing the role of deception in natural history, both structural (camouflage and mimicry) and behavioral (hiding, stalking, the angler fish that uses its tongue as a worm, for bait). Animals are repeatedly naturally selected to deceive each other; plants deceive insects; those that can do so survive better, though there is also adaptive value in being able to detect deception. Humans arise in this genetic tradition, and are genetically disposed, in part, to be deceivers. Deception is required in culture, though there is a long cultural tradition that judges deception negatively. Metaphysically, the natural world is meaningless; nihilism is true. But humans need myths otherwise, and hence the religious and philosophical traditions. Science erodes these myths, revealing these deceptions about nature and within culture. Unfortunately, we need some such myths to survive, else science will prove maladaptive. Nature is objectively valueless, but we need to deceive ourselves into believing in its intrinsic value. We have to be saved from the truth. We need "the saving grace of noble lies." We can only live "by the grace of guile." Rue teaches philosophy and theology at Luther College (Luther College?!), and he seems to have managed to practice the self-deception he preaches; he describes himself as a "theoretical nihilist and an existential biophilic" (p. 278).

--Smith, Steven G., "Sympathy, Scruple, and Piety: The Moral and Religious Valuation of Nonhumans," *Journal of Religious Ethics* 21 (no. 2, 1993):319- 342. Our moral valuation of nonhuman and human beings alike may arise in sympathy, the realization in feeling of a significant commonality between self and others; in scrupulous observance of policy, the affirmation in practical consistency of a system of relations with others; and in piety, the attitude of boundless appreciation and absolute scruple with respect to objects as sacred--that is, as valued for the sake of adequate valuation of the holy. Differences between the moral status of humans and that of nonhumans are to be explained not by any single criterion such as the capacity to suffer or to make contracts, but rather by finding the relative position of humans and nonhumans on continua of feelable commonality, policy considerateness, and sacredness. Investigation of these differences must take into account the way basic religious apprehensions (or the absence thereof) organize these frames of reference. Smith is in religious studies at Millsaps College, Jackson, MS.

--Wallace, Mark I., "The Wild Bird Who Heals: Recovering the Spirit in Nature," *Theology Today* 50 (no. 1, 1993):13-28. The Bible's creation hymns teach us that we are earth creatures, mud people, molded by the cosmic potter out of the clay of earth. But many of us in the postmodern West construe ourselves differently as denizens of a shopping-mall, temperature-controlled, throw-away world in which we have little need for reidentification with the primitive soil of our ancestral origins. Others, however, hunger for a renaturalized Christianity where the palpable sense of divine presence can be touched and tasted and heard and smelled in the push and pull of natural beings and forces. Wallace is in religious studies at Swarthmore College.

--Gosling, David, *A New Earth: Covenanting for Justice, Peace and the Integrity of Creation*. London: CCBI, Inter-Church House, 1992. 108 pages. \$5.95. ISBN 0-85169-222-2. The history of the ecumenical movement's concern with the environment, tracing the connection between debt, sustainability, biotechnology, and eco-justice. Well documented and a sophisticated study. The churches have a concern for the planet as an essential part of their ecumenical responsibility. "There can be no satisfactory solutions to the world's problems which do not take into account the structural links between the state of the environment and the systematic violations of justice and peace which occur." Gosling was director of Church and Society for the World Council of Churches and is currently a fellow in the University of Cambridge at Clare Hall.

--Preston, Richard, *The Hot Zone*. New York: Random House, 1994. 300 pp. \$ 23.00. Claims that there is great danger to human life from viruses and other diseases that are native to tropical forests, and which serve a typical ecological role in those ecosystems, but which, when spreading to humans in cities, can play havoc and bring death. The HIV virus, originally in green monkeys in Central Africa, is an example. Another is the Marburg strain of the Ebola virus, detected in Marburg, Germany in 1967 in a shipment of monkeys, and which is highly lethal in humans. This book was first serialized in *The New Yorker*.

--Glantz, Michael, ed., *Drought Follows the Plow*. New York: Cambridge University Press, 1994. \$ 19.95. Reversing an 19th century adage of the sodbusters, "rain follows the plow," the contributors here argue just the opposite, that droughts are often human-caused. Most of Earth's fruitful, rain-fed land is already in use. To try to farm marginal land, often arid or semiarid, can hasten agricultural drought. Such regions are ill-suited for farming in the first place and, with misguided human disruptions, a spiraling downward trend initiates, compounded when drought comes. Rich nations, like the U. S. and Australia can buy their way out of droughts, but in a country like Ethiopia, where an elite majority owns the good land and the majority must attempt to survive on marginal land, and where population growth is out of control, mass starvation is the likeliest scenario. Nature is likely to be blamed, because no one in government wants to admit responsibility for inept planning. Glantz is director of the Environmental and Societal Impacts Group at the National Center for Atmospheric Research, Boulder, Colorado.

--Wildlife Viewing Guides are now available for about half of the U.S. States, and some Canadian provinces, through the Watchable Wildlife Program, with about a dozen partners from the major federal and state (and provincial) agencies, also Defenders of Wildlife. Contact Falcon Press, P. O. Box 1718, Helena, MT 59624. 800/582-2665. Falcon Press is also excellent for various scenic guides, trail guides, biker's guides, and so forth to the countryside.

--Green Electronics. A special report in IEEE Spectrum, vol. 31, no. 8, August 1994. Includes Patricia A. Dillon, "Salvageability Becoming Law." Legislation is driving electronics companies to prepare for products for later recycling. The effort foreshadows a future in which most of the content of obsolete electronic products will be reclaimed.

--L. Westra and P. Wenz, *Faces of Environmental Racism: Confronting Issues of Global Justice*, Rowman Littlefield Publishers, Inc., Lanham MD, 1995. Authors include Robert D. Bullard, Clarice Gaylord, Hussein Adam, Bill Lawson, Robert Goodland, Howard McCurdy, Kristin Shrader-Frechette, Omari Kokole, Peter Wenz, and Laura Westra. Although most minorities are bearing disproportionate burdens such as toxic waste exposure and other environmental hazards. This volume deals exclusively with persons and communities of color who are either African or African American. Holistic approaches to environmental protection are generally accepted as necessary to preserve the ecosystem and avoid mass extinctions that jeopardize human existence. However, such approaches may be viewed as risking some individuals or groups for the good of the whole. As well, ecocentric environmentalists are often viewed by the general public as unconcerned about human hazards: "If it doesn't swim upstream or hoot in the night, environmentalists don't care about it." (Withlynn Battle, Community leader, Birmingham, AL). These essays show that environmentalism and concern for human beings and justice are entirely compatible.

--L. Westra and J. Lemons, *Scientific and Ethical Perspectives on Ecosystem Integrity*, Kluwer Academic Publishers, Dordrecht, The Netherlands, 1995. A collection of essays by philosophers and scientists, drawing together many of the issues discussed by the participants in the meetings of L. Westra's SSHRC (Canada) Grant: "The Integrity Project", 1992-95. Authors include Mark Sagoff, Kristin Shrader-Frechette, Robert Ulanowicz, James Kay, Henry Regier, James Karr, Patricia Werhane, Tom Lacher, Jr., Robert Goodland and others. The essays discuss the "Ecosystem approach" and the mandate "to protect and restore integrity" from various critical perspectives.

## ISSUES

Green Antarctica, *Without Ozone*: Scientists from the British Antarctic Survey report that global warming has led to a rapid increase in plant life in Antarctica. The continent's only two flowering plants have increased rapidly, with a 25-fold increase in the number of Antarctic hairgrass plants on Galindez Island, and a sharp increase in the Antarctic pearlwort. Also, two new species have been discovered, presumably appearing as long-frozen seeds are freed by melting ice. At the same time the World Meteorological Organization reports that the ozone layer has declined, surpassing all previous low records. Apparently ozone depletion is still occurring at an alarming rate, indicating that chlorofluorocarbons already in the atmosphere are continuing to destroy the ozone layer, and despite the agreements to phase out the production of ozone-depleting chemicals. Story in *The Antarctica Project* (newsletter), vol. 3, no. 4, Fall, 1994.

Death Penalty for Smallpox: A World Health Organization committee voted unanimously in September to destroy the remaining lab stocks, held at the Center for Disease Control in Atlanta

and Moscow's Institute for Viral Preparations. WHO member nations are expected to agree in May, and the virus will be wiped off the planet by June 30, 1995. Story in Science, 16 September, 1994.

A recent issue of the Globe and Mail, Canada's national newspaper had an article "B.C. Panel Seeks Strict Controls on Human Settlement," which explains a recent land-use plan under "ground-breaking" legislation proposed by B.C. Commission on Resources and the Environment. The regulations intend to use sustainability as "standard", and to enforce strict legislation about certain percentages of protected wildlands as well as equally strict requirements and standards to be met prior to any development or resource- use decision. This runs counter to the planning tradition in B.C., which has been leaving these decisions in the hands of individual communities.

Contributed by L. Westra.

1995

--January 9-11. Care for the Earth: Sustaining our Fragile Home. Sixtieth Annual Minister's Week, The Candler School of Theology, Emory University, Atlanta, GA. Speakers include JÅrgen Moltmann, theologian at the University of TÅbingen. Contact: Candler School of Theology, 400 Bishops Hall, Emory University, Atlanta, GA 30322. Phone 404-727-6352.

--February 16-21. American Association for the Advancement of Science, Atlanta, Georgia. With an ISEE session organized by Bryan Norton, Georgia Institute of Technology. Sections on biological diversity, on sustainable development, on global change, on innovative environmental technologies, on the extent of environmental remediation, on the carrying capacity of Planet Earth, and many others. AAAS, 1333 H. St., N. W. Washington, DC.

--February 23-26. Sharing the Prairies: Sustainable Use of a Vulnerable Landscape, in Lethbridge, Alberta, Canada. Contact Patrick Herzog, Institute for Renewable Resource Management, Lethbridge Community College, 3000 College Drive south, Lethbridge, Alberta, Canada. 403/382-6991. FAX 404/320-1461.

--March 6-12. World Summit for Social Development, in Copenhagen, Denmark. With a focus on sustainable development, consistent with environmental conservation. Contact: Jacques Baudot, Coordinator, WSSD, Department for Policy Coordination and Sustainable Development, United Nations, United Nations, NY 10017. Phone 212-963-5558. FAX 212-963-3062.

--March 8-11. Gambling with the Environment, Las Vegas, Nevada! Biannual meeting, American Society for Environmental History. Call for papers. Contact: Theodore Steinberg, Department of Humanities, New Jersey Institute of Technology, University Heights, Newark, NJ 07102-1982.

--March 15-17. Environmental Regulation and Prescribed Fire: Legal and Social Challenges, in Tampa, Florida. Contact Diane Otts, Center for Professional Development and Public Service, Florida State University, Tallahassee, FL 32306-2027. Phone 904/644-7543. FAX 904/644-2589.

--March 15-18. Institute for Ecology, Justice and Faith. International House, University of Chicago. Intensive cross-disciplinary seminar for faculty and graduate students and leaders of religious and environmental organizations. Funded by World Environment and Resources Program of the MacArthur Foundation, with collaborative support from the Center for Respect of Life and Environment and the Humane Society of the United States. Hosted by Meadville/Lombard Theological School. Presenters include Yi Fu Tuan, Robert Gottlieb, Dieter Hessel, Peter Bakken, David Rhoads, Dianne Bergant, Phil Hefner, Rosemary Radford Reuther, Debra Moskovits, J. Baird Callicott, Christine Traina, Donald Brown, Bill French, Ray Benton, Rick Clugston, Michael Fox, David Tracy, Holmes Rolston, III, and George Rabb. Contact John Callaewart, Registrar, Institute for Ecology, Justice and Faith, 1304 W. Elmdale, # 1, Chicago, IL 60660. Phone 312/508-2206.

--March 20-22. Recent Advances in Urban and Post-Industrial Wildlife Conservation and Habitat Creation, Leicester, England. British Ecological Society meeting. Contact Susan Page, Departments of Adult Education and Zoology, University of Leicester, University Road, Leicester, UK LE1 7RH. Phone 44 533 523337. FAX 44 533 523330.

--March 30-April 2. Communication and our Environment: An Interdisciplinary Conference, Chattanooga, Tennessee. Papers are invited on how media influences our concept of the natural environment, for better or worse. Contact: M. Jimmie Killingsworth, Department of English, Texas A&M University, College Station, TX 77843. Phone 409-845-9936.

--April 12-15. Hunting, Fishing, Conservation, and Ecology, at Philadelphia. Proposals by September 15, 1994 to Ralph H. Lutts, 1025 Jefferson Circle, Martinsville, VA 24112. Phone/fax 703-666-1295. E-mail: rhlutts@igc.apc.org

--April 17-21. Sustainable Society and Protected Areas, 8th Conference on Research and Resource Management in Parks and Public Lands, Portland, Oregon. Sponsored by the George Wright Society. There is a call for papers. The George Wright Society, P. O. Box 65, Hancock, MI 49930-0065. 906-487- 9722. FAX 906-487-9405.

--May 25-27, 1995. "Surviving Globalization: Economic, Social and Environmental Dimensions," London, Ontario, The Westminster Institute for Ethics and Human Values. See details earlier. Contact: Ted Schrecker, Associate Director (Environmental Ethics) Westminster Institute for Ethics and Human Values, 361 Windermere Road London, Ontario N6G 2K3 Canada. Phone (519) 673-0046; FAX (519) 673-5016. E-mail schrecker@sscl.uwo.ca

--June 2-3. The Canadian Society for the Study of Practical Ethics (CSSPE), at the Canadian Learned Societies Meetings, with section on Environmental Ethics, Montreal, Quebec. Contact: Mary Richardson and Peter Miller, Program Co-Chairs, c/o Department of Philosophy, University of Winnipeg, 515 Portage Ave., Winnipeg, Manitoba R3B 2E9, Canada. E-mail: miller@uwpg02.uwinnipeg.ca Phone: (204) 786-9832; or Thom Heyd or Andrew Light (addresses above).

--June 2-3. Society for Philosophy and Geography, and Canadian Society for the Study of

European Ideas, at the Canadian Learned Societies Meetings, Montreal, Quebec, with section on "Ideas of Nature and Land." See announcement earlier.

--June 2-4, Natural and Human Introduced Change in Madagascar, at the Field Museum in Chicago. Contact B. D. Patterson, Center for Evolutionary and Environmental Biology, The Field Museum, Chicago, IL 60605-2496. Phone 312/922-9410 x468.

--June 7-11. Society for Conservation Biology, Colorado State University, Fort Collins. See announcement above.

--June 8-11. Agriculture, Food, and Human Values Society, and the Association for the Study of Food and Society. Joint Meeting, Tuskegee University. Contact Duane Merlin Ford, Science Division, Northeast Missouri State University, Kirksville, MO 63501-0828.

--June 10-13. National Association of Environmental Professionals, 20th annual conference, "Environmental Challenges: The Next 20 Years. Washington, DC. There is a call for papers, with papers welcome in the fields of ethics, values, and policy. Contact: NAEP, 5156 MacArthur Boulevard, NW, Washington, DC 20016-3315. 202-966-1500. FAX: 1977.

--June 21-25. Interdisciplinary Conference on the Environment, Park Plaza Hotel and Towers, Boston, Massachusetts. Call for papers. Contact Dr. Demetri Kantarelis, IEA, Economics/Foreign Affairs Dept., Assumption College, 500 Salisbury Street, Worcester, MA 01615-0005. Phone 508-752- 5615, ext. 557. FAX 508-799-4502.

--June 25-30. Third International Conference on Ethics in the Public Service, "Politics, Ethics, and the Professions," in Jerusalem, June 25-30, 1995, with an ISEE section. See more detailed announcement above.

--June 26-29. Vienna, Austria: Sixth Annual Conference of the International Society for Business and Society (IABS). Topics include corporate social responsibility and environmental management. Three-page (maximum) abstracts are due 28 November 1994. Send to the Program Chair: Douglas Nigh, College of Business Administration, University of South Carolina, Columbia, SC 29208 USA; tel. 803-777-6942; FAX 803-777-3609.

--July 2-7. Australian Association of Philosophy (Australian Division), annual conference at University of New England, Armidale, NSW. ISEE section and papers are invited. See the announcement above.

--July 7-16. 10-day Summer School in Applied Deep Ecology, Chinook Learning Center, Whidbey Island, Washington. Contact The Institute for Deep Ecology, P. O. Box 1050, Occidental, CA 95465. Phone 707/874-2347.

--July 16-20, Amsterdam. Fourth International Conference of the American Society of Law, Medicine and Ethics, the University of Amsterdam, and the Dutch Society of Health Law. A theme (no. IV) is "Health, Ecology, Persons and Planet." The connections between human health and ecological health, including how new concepts developed in medicine, ethics, and law might

be applicable to the promotion of ecological health, and vice-versa. These include resource allocation; justice (including inter-generational justice) in health care; open and closed legal systems and concepts of trust, covenant and quality of life.

--July 16-21. Conference, International Association for Bear Research and Management, University of Alaska, Fairbanks. With a session on bears in the Yellowstone ecosystem. Papers invited. Contact: Harry Reynolds, Alaska Department of Fish and Game, 1300 College Road, Fairbanks, Alaska 99701- 1599. FAX 907-452-6410

--July 30-August 3. Ecological Society of America, in Snowbird, Utah. ISEE sponsored a session last year (in Knoxville, Tennessee) and interested persons should contact Laura Westra, address below. The Ecological Society of America has 6,300 members and this is an excellent opportunity for philosophers, ethicists, and others to interact with them. For conference details: Ecological Society of America, 2010 Massachusetts Ave., N.W., Suite 420, Washington, DC 20036. Phone 202-833-8773.

--August 1-5. XIII International Congress of Aesthetics, Lahti, Finland. Theme: Aesthetics in Practice: Connections between Academic Research in Aesthetics and Everyday Life, especially Concerning the Environment." This follows and continues a very successful First International Conference on Environmental Aesthetics held at Koli National Park in Finland this past June. Papers on the aesthetics of nature are especially welcomed. Contact: Sonja Servomaa, University of Helsinki, Lahti Research and Training Centre, Kirkkokatu 16, 15140 Lahti, Finland. Phone 358-18-892 11. FAX: 358-18-892 219.

--August 3-10 (Corrected Date). YMCA of the Rockies, Estes Park, Colorado. Society for Philosophy in the Contemporary World (SPCW). Proposals on topics in environmental ethics, animal ethics, and ecophilosophy are welcome. Opportunities for hiking in the Rockies. Accommodations for children and families. Contact: Prof. John Jones, Program Chair, Department of Philosophy, Marquette University, Milwaukee, WI 53233 USA, tel. 414-288-6857; Email <6563jonesj@vmsa.csd.mu.edu>

--August 6-10. American Institute of Biological Sciences meets in San Diego, Town and Country Hotel. Contact AIBS, 730 11th St., N.W. Washington, DC 20001-4521, Phone: 202-628-1500; FAX: 202-628-1509.

--August 6-12. International Union of Forestry Research Organizations (IUFRO), 20th World Congress, Tampere, Finland.

--August 9-12, Turku, Finland, International Conference on "Doing the Decent Thing with Genes". Topics include the Human Genome Project, the ethics of genetic intervention, Defective Genes, and the Commercial Use of Genetic Inventions in Agriculture and Animals. Invited speakers include Gregory Fowler, Ruth Chadwick and Laura Westra.

--August 26-29, Cortona, Italy, Laura Westra, Brunetto Chiarelli, Dr. Pierre diToro, and Dr Phillippe Crabbe are co-organizing a conference on Environmental Ethics, Philosophy of Ecology and Bioethics. You are invited to submit a manuscript or a two-page abstract to L. Westra

(University of Windsor) by March 1, 1995. Invited speakers include Kristen Shrader- Frechette, Philippe Crabbe, Klaus Meyer-Abich, Mark Sagoff, James Sterba, Peter Wenz, Henry Regier, James Karr and other scientists and philosophers.

1996

--January 1-8, 1996, International Development Ethics Association (IDEA), Fourth International Conference, on Globalization, Self-Determination, and Justice in Development, in Tamil Nadu, India. Send abstracts by March 30, 1995 to Peter Penz, Faculty of Environmental Studies, York University, 4700 Keele Street, North York, Ontario M3J 1P3, Canada. FAX 416/736-5679. E-mail: es050005@orion.yorku.ca

--May 18-23, 1996. Sixth International Symposium on Society and Resource Management, Pennsylvania State University, State College, PA.