Laarman, Jan, "2050: A Scenario for People and Forests," Journal Of Forestry 98 (No. 2, 2000, Feb 01): 4-. Two retired foresters in the year 2050 recall how events and trends during the preceding 50 years transformed forestry and its practitioners. (v.11,#2)

LaBastille, Anne. "Too Late for the Giant Grebe", Wild Earth 6(no.3, 1996):63. (v7,#4)


LaBossiere, Michael, "Body and Environment." Environmental Ethics 16(1994):411-418. My thesis is the biconditional that it is morally wrong to pollute human bodies if and only if it is morally wrong to pollute the environment. The argument for each conditional is by analogy: pollution of one type is analogous to pollution of the other type in morally relevant respects. I argue that the truth of the biconditional makes it difficult to maintain that it is morally wrong to pollute human bodies without maintaining that it is morally wrong to pollute the environment and conversely. LaBossiere is with the Dept. of Visual Arts, Humanities, and Theatre, Florida Agricultural and Mechanical University, Tallahassee. (EE)


Lacey, Mark, "President's Decree Protects Thousands of Acres in West," New York Times (1/12/00). Clinton Creates More New National Monuments. In January, U.S. President Bill Clinton designated 1,500 square miles along the North rim of the Grand Canyon the Grand Canyon Parashant National Monument. Although opposed by Arizona Governor Jane Hull and the state's seven Republican congressmen, 80 percent of state's residents supported his action. In April, the president created a new 335,000 acre national monument in California to protect remaining old-growth Sequoia forests. Clinton has now set aside more land as national monuments than any president except for Jimmy Carter (who designated vast expanses of lands in Alaska as monuments). (v.11,#1)

Lacey, Hugh, Values and Objectivity in Science: The Current Controversy about Transgenic Crops. Lanham, MD: Rowman and Littlefield, 2005. Transgenic agriculture as a case study in social values and their role in science.


LaChance, Albert J. and John Carroll, eds. Embracing Earth: Catholic Approaches to Ecology. Maryknoll. NY: Orbis Books, 1994. 280 pages. $18.95 paper. Contemporary Catholic writers explore that Christian view of nature, the human place in it, and the need to respond to the
planetary crisis. (v6,#1)


Lachapelle, P. R., McCool, S. F. and Patterson, M. E., "Barriers To Effective Natural Resource Planning in a 'Messy' World," Society and Natural Resources 16(no. 6, 2003): 473-490.


LaChapelle, Delores, Deep Powder--40 Years of Ecstatic Skiing, Avalanches, and Earth Wisdom. Durango, CO: Kivaki Press, 1993. $ 6.95. Deep ecology mixed with deep powder skiing. When skiing, nature is in control, guiding the visitor along the most thrilling courses. Our sense of self, an individual, separate from all others and the earth, prevents us from experiencing and enjoying our senses of the moment. Freedom is finding one's place in nature. LaChapelle is the other of several previous books, including Earth Wisdom. (v4,#3)

LaChapelle, Delores, Sacred Land, Sacred Sex, Rapture of the Deep: Concerning Deep Ecology---and Celebrating Life. Silverton: Finn Hill Arts, 1988. Pp. 383. A far-ranging work of deep ecology that analyzes the "uprooting" of human life and the strategies necessary for recovering our past in an essential interconnection with the land and with nature. This interdisciplinary work defies an easy academic classification; it shows us the connections between all major fields of study and life in the natural and human community. (Katz, Bibl # 2)


Lackey, Robert T., "Ecological Risk Assessment," Fisheries 19, no. 9 (September 1994): 14-18. Risk assessment is used by the scientific elite as a tool to impose their values on the public in the guise of scientific objectivity. The affluent drive the decision-making process of managing and protecting ecological resources. Ecosystem "health" is a strictly anthropocentric notion, and risk assessment will likely be perceived as a form of ecological triage. Lackey is deputy director of the EPA's Environmental Research Laboratory in Corvalis, OR, USA, and holds a courtesy professorship in wildlife and fisheries at Oregon State University. This paper, nor the ones that follow, do not reflect EPA policy positions. (v6,#2)

Lackey, Robert T., "Seven Pillars of Ecosystem Management," The Environmental Professional 17, no. 4 (1995): (in press). The seven pillars are: 1) the continuing evolution of social values and priorities; 2) place-based, necessitating clearly defined boundaries; 3) achievement of social benefits; 4) ecosystemic stress factors; 5) biodiversity, which may or may not be a factor; 6) "sustainability," if used as a concept in management, needs to be clearly defined; and 7) scientific information is important but only one element in decision-making, which is fundamentally one of public or private choice. (v6,#2)

Lackey, Robert T., "Ecosystem Health, Biological Diversity, and Sustainable Development: Research That Makes a Difference," Renewable Resources Journal (1995) (in press). Addressing important policy problems and being reasonably likely to be achievable scientifically are the criteria for selecting research. Research especially needed today is: 1) credible
procedures to determine ecosystem health, 2) scientific bases for legislation regarding biodiversity and endangered species, and 3) a clear understanding regarding the interrelationship of ecosystem stability, biodiversity, and such external stress as habitat alteration (including development) and harvesting biotic resources. (v6,#2)

Lackey, RT, "Values, Policy, and Ecosystem Health," Bioscience 51(no. 6, 2001):437-444. (v.13,#1)

Lackey, Robert T. AScience, Scientists, and Policy Advocacy. Conservation Biology Vol. 21, no. 1 (2007): 12-17. ATo scientists, I say get involved, but play the appropriate role. If you choose to advocate your personal policy preferences, make it clear to everyone involved that you have stepped out of a scientific role and into the role of policy advocate.@


Ladkin, Donna, "Does `Restoration' Necessarily Imply the Domination of Nature?" Environmental Values 14(2005):203-219. `Restoration' is a contested term holding important implications for public policy decisions in the areas of land development and use. A number of environmental philosophers including Eric Katz and Robert Elliott have argued against `restoration', on the principle that human efforts can never restore natural landscapes to their pre-disrupted value, and that the assumption of our ability to do so implies `domination'. This paper argues that restoration attempts should not be dismissed `out of hand', and can be conducted outside of a `dominator logic' provided four criteria are enacted: 1) humans see their role as co-creators working alongside nature, 2) the aim of restoration is seen to be increase of land health and bio-diversity 3) there is a commitment to learning from the land and 4) the land's own `projects' (Plumwood) are taken into account. Ladkin is in the Centre for Leadership Studies, University of Exeter, UK. (EV)

LaDuke, Winona, "The Seventh Generation: Rethinking the Constitution," Wild Earth 9 (No. 4, Wint 1999): 21-. (v.11,#2)


Laferrière, Joseph E., "Humanism and the Environment," Religious Humanism 25 (no. 3, Summer, 1991):117-124. Humanists recognize that we are not alone on this planet; we must share the earth with our neighbors. Unlike Christianity, humanism accepts that this world is the only one we will ever know. Nature is everything. This being so, we must take care of the environment, for the present and for the future. Laferrière is professor and director of the herbarium at Washington State University, Pullman. (v3,#1)

Lafferty, Mike, "Bugsicles," Polar Times, January 2005, p. 9. The tiny Antarctic midge, Belgica antarctica, spends 22 of its 24 month life cycle encased in ice and with most of its own interior frozen. And when the ice melts, it dries out and looks dead, black and wrinkled, something like a quarter inch raisin. Yet this is the continent's largest land animal. (Biologists count the penguin
as a marine animal. Small in size, this is a super-bug, because it can take almost anything that nature throws at it, super-cold, super-dry, super-salty water, or fresh water, and super acidic to super alkaline conditions. The midge exemplifies life in extremes. Story first appeared in the Columbus Dispatch, September 21, 2004.


--Dobson, Andrew, "Representative Democracy and the Environment," pages 124-139.
--Oriordan (O'Riordan), Timothy, "Democracy and the Sustainability Transition," pages 140-156.
--Bichsel, Anne, "NGOs as Agents of Public Accountability and Democratization in Intergovernmental Forums" pages 234-255.

Lafferty is in political science, University of Oslo. Meadowcroft is at the Oxford Centre for Environment, Ethics and Society. (v.10,#3)


-Frey, R. G., "Animals"
-Shrader-Frechette, Kristin, "Environmental Ethics."

LaFollette, Hugh, ed., Ethics in Practice: An Anthology. Cambridge, MA: Blackwell Publishers, 1997. 703 pages. Large anthology, many contributions written especially for this anthology; others previously published are revised with general readers in mind. Sections on euthanasia, abortion, family and friends, sexuality, virtues, drugs, free speech, sexual and racial


LaFranchi, Howard. "Tradition in Turmoil: Dutch Agriculture Evolves." *The Christian Science Monitor*, 6 July 1994, pp. 7, 14. Dutch farmers are among the world’s most efficient. Tougher environmental rules are causing small farmers to quit. Only 4 percent of the population, farmers utilize two-thirds of the land and export $15 billion of their $21 billion production. (v5,#2)


LaFreniere, Gilbert F., "Rousseau and the European Roots of Environmentalism,' *Environmental History Review* 14(no 4, Winter 1990):41-72. "Jean-Jacques Rousseau particularly deserves recognition by environmentalists for a complex view of man's relation to nature which greatly influenced the Romantic viewpoint." LaFreniere teaches environmental studies at Willamette University, Salem, Oregon. (v2,#1)

Lai, Karyn L. "Conceptual Foundations for Environmental Ethics: A Daoist Perspective." *Environmental Ethics* 25(2003):247-266. and plausible account of environmental holism. Dao refers to the totality of particulars, including the relations that hold between them, and the respective roles and functions of each within the whole. De refers to the distinctiveness of each particular, realized meaningfully only within the context of its interdependence with others, and its situatedness within the whole. Together, dao and de provide support for an ethical holism that avoids sacrificing individuals for the sake of the whole. The integrity and stability of the whole are important not because the whole is an end-in-itself but because those conditions assist in preserving the well-being of the constituent parts. In other words, the ethical holism supported in
the Daodejing does not present individuals and wholes in mutually exclusive terms, but sees them in symbiotic relation, allowing for events to be mutually beneficial, or mutually obstructive, to both. In addition, two other Daoist concepts, wuwei (non-action) and ziran (spontaneity), provide further support for this construction of holism. If the distinctiveness of particular individuals is valued, then unilateral or reductive norms which obliterate such individuality are inappropriate. In this regard, the methodology of wuwei allows for the idea of individuals developing spontaneously in relation to others. According to this view of holism, individuals manifest and realize their integrity in relation to others in the environmental context, achieving an outcome that is maximally co-possible within those limits, rather than one that is maximally beneficial only for particular individuals. (EE)


Lal, R., Miller, F. P., & Logan, T. J., "Are Intensive Agricultural Practices Environmentally and Ethically Sound?", Journal of Agricultural Ethics 1(1988):193-210. Soil is fragile and nonrenewable but the most basic of natural resources. It has a capacity to tolerate continuous use but only with proper management. Improper soil management and indiscriminate use of chemicals have contributed to some severe global environmental issues. The policy and moral aspects of these issues are discussed. Lal, Miller, Logan are in agronomy at Ohio State University, Columbus.

Laland, Keven N., Brown, Culum, and Krause, Jens, "Learning in fishes: from three-second memory to culture," Fish and Fisheries 4 (2003):199-202. "Gone (or at least obsolete) is the image of fish as drudging and dim-witted pea-brains, driven largely by 'instinct,' with what little behavioral flexibility they possess being severely hampered by an infamous 'three-second memory.'" "Now fish are regarded as steeped in social intelligence, pursuing Machiavellian strategies of manipulation, punishment and reconciliation, exhibiting stable cultural traditions, and co-operating to inspect predators and catch food." "Although it may seem extraordinary to those comfortably used to pre-judging animal intelligence on the basis of brain volume, in some cognitive domains, fishes can even be favourably compared to non-human primates." Laland is in biology, University of St. Andrews, Scotland. Brown is in biology at the University of Edinburgh. Krause is in biology at the University of Leeds, UK. In a study led by physiologist Lynne Sneddon, researchers found 58 receptors on the head of a trout that are sensitive to pain, despite the conclusions of previous studies that fish lacked pain receptors, or nociceptors. Forthcoming in Proceedings of the Royal Society. (v.14, #4)


LaMay, Craig L. and Everette E. Dennis, eds., Media and the Environment. Covelo, CA: Island Press, 1991. 220 pages. $ 31.95 cloth, $ 17.95 paper. Advocacy vs. objectivity in environmental reporting. Does "news worthiness" distort environmental reporting? Do complex ecological, political, economic, and social issues have to be oversimplified for the media? Articles by journalists and others, including Jim Detjen, Philadelphia Inquirer reporter and president of the
Lamb, David. "Animal Rights and Liberation Movements." *Environmental Ethics* 4(1982):215-33. I examine Singer's analogy between human liberation movements and animal liberation movements. Two lines of criticism of animal liberation are rejected: (1) that animal liberation is not as serious as human liberation since humans have interests which override those of animals; (2) that the concept of animal liberation blurs distinctions between what is appropriate for humans and what is appropriate for animals. As an alternative I offer a distinction between reform movements and liberation movements, arguing that while Singer meets the criterion for the former, a higher degree of autonomy and communicative competence is necessary for the latter.

In the final section, objections to the possibility of an autonomous animal liberation movement are met by rejecting assumptions concerning the illogicality of interspecies communication. Lamb is in the department of philosophy, University of Manchester, Manchester, England, UK. (EE)


Lamb, Kara L., "The Problem of Defining Nature First: A Philosophical Critique of Environmental Ethics," *The Social Science Journal* 33 (no. 4, 1996):475-486. Before we can decide about the proper ways to conserve nature, we need an accurate idea of what nature is. Subjectivists vs. objectivists, anthropocentrists vs. biocentrists, conservationists vs. preservationists are at odds over what they value in nature because they perceive and conceive nature differently. Some suggestions for solutions, based on the work of Val Plumwood and Holmes Rolston, involving an analysis of how to pass from what nature is to what ought to be in nature. Lamb is a graduate student at Colorado State University. (v.7,#4)

Lamb, David, Peter D. Erskine, and John A. Parrotta, "Restoration of Degraded Tropical Forest Landscapes," *Science* 320 (9 December 2005): 1628-1632. The current scale of deforestation in tropical regions underscores the urgent need for interventions to restore biodiversity, ecological functioning and the supply of goods and services previously used by rural poor communities. Traditional timber plantations have made only minor contributions to fulfilling most of these other objectives. New approaches to reforestation with great potential are now emerging. Lamb and Erskine are with the Rainforest Cooperative Research Center and School of Integrative Biology, University of Queensland, Brisbane, Australia.

Lamb, Kara Lee, *From Philosophy to Policy: Is There a Missing Link in Environmental Ethics?*, M.A. thesis, Colorado State University, summer 1998. Environmental ethics is often thought to restrict permissible environmental activities by introducing various duties, responsibilities, and prohibitions with which environmental policy and the public must comply. Rather, environmental ethics can and ought enlighten policy by providing a more adequate philosophical grounding in value for legislation. The National Environmental Policy Act (NEPA), though it requires an Environmental Impact Statement, leaves deeper value questions untouched, and leaves agencies with conflicting goals often at cross purposes. Environmental ethics can clarify these value questions. Despite its many insights, however, environmental ethics itself contains conceptual conflicts which reduce its capacity effectively to link with environmental policy. Three proposals for making environmental ethics more effective are based on the work of Val Plumwood, Paul Taylor, and Holmes Rolston. Lamb has a position with the U. S. Bureau of Reclamation interpreting environmental policy to the public and overseeing the public participation process in evaluating that policy. (v9,#2)


208. Ten guiding principles to guide an ecological consciousness, with each of these used to reinterpret the primary locus of productivity as Earth. Lambert is with Productivity Breakthrough, Inc., in Scarsdale, NY. (v3,#4)

Lambert, Richard. "The Earth: The Business of the Future--From EGO Energy to ECO Energy." Population and Environment 19, no. 1 (1997): 95-107. Two distinctions are offered that together provide a new form of reference for bonding the human and the Earth: (1) the difference between the emerging domain of ego energy and the yet to be discovered domain of eco energy; and (2) the difference between looking-at and seeing. These two sets of distinctions are then sounded, like echo chambers, against ten guiding ecological statements. The result is a "turn-around perspective": a different vision to be operationalized in individual, community, and business lives. Now seeing clearly, people can respond with eco energy worth of commitment to "the Earth: the Business of the Future." (v8,#3)


Lancaster, Carol. Aid to Africa: So Much to Do, So Little Done. Chicago: University of Chicago Press, 1999. 303 pages. Aid has rarely helped and has sometimes damaged the capacity of the Africans to govern their own affairs. In more than one African country, "the accountability of the government to its people ... gradually [was] replaced by accountability to its major donors." Aid has helped to destroy what fragile reciprocity may have existed between African states and their citizens. Agencies often misdiagnosed problems, had difficulty designing programs that addressed the local political environment, and failed to coordinate their efforts effectively. Lancaster is director of the Master of Science in Foreign Service Program at Georgetown University and was an administrator of USAID. (v.11,#1)


Landman, Willem A. "Moral Standing, Value and Environmental Ethics." South African Journal of Philosophy 14 (# 1, February 1995): 9-19. How should an environmental ethic be grounded? An answer involves a commitment to a criterion of moral standing and its application, and a wider commitment to a taxonomy of the senses of "value" that inform our relationship with nature. I begin by mapping the different environmental philosophies in order to contextualize my argument. After an analysis of the concept of moral standing I analyze why being a person is a sufficient condition of moral standing. I defend sentience as a condition of moral standing that is not only sufficient but also necessary, and I set out the taxonomy of the senses of "value" that informs a sentience-based environmental ethics. I reject life as a criterion of moral standing and the value commitments of a life-based environmental ethic. I end with some remarks that a sentience-
based environmental ethic might be inadequate if we should lose our aesthetic and spiritual sense. Landman is in philosophy at the University of the Western Cape, Private Bag X17, Bellville 7535, Republic of South Africa. (v6,#1)

Landres, Peter, Shannon Meyer, and Matthews, Sue, "The Wilderness Act and Fish Stocking: An Overview of Legislation, Judicial Interpretation, and Agency Implementation," Ecosystems 4(2002)287-295. Many high-elevation lakes in designated wilderness areas are stocked with native and non-native fish to provide recreational opportunities, sometimes in waters that originally had no fish. There is a long-standing controversy about the extent to which this compromises other wilderness values. Landres and Meyer are with the Aldo Leopold Wilderness Research Institute, Rocky Mountain Research Station, USDA Forest Service, Missoula, MT; Matthews is with the Arthur Carhart National Wilderness Training Center, US Fish and Wildlife Service, Missoula, MT. This issue of Ecosystems is a theme issue on fish stocking impacts to mountain lake ecosystems.

Landscape and Urban Planning invites both subscriptions and papers. This is an international journal of landscape ecology, landscape planning, and landscape design. They ask for papers in environmental psychology, conservation biology, and ethical and policy issues posed by nature and human use of land. The editor-in-chief is J. E. Rodiek, College of Architecture, Texas A & M University, College Station, TX 77843-3137. The publisher is Elsevier Science. (v8,#1)


Lane, Belden C., "Open the Kingdom for a Cottonwood Tree," Christian Century 114(no. 30, October 29, 1997):979-983. "Trees should be included in the community of the sacred, and even in the communion of saints. ... We must extend justice to the creatures that sustain human life, using their products with gratitude and respect. Appreciation for these gifts entails an ethical reappraisal of logging practices and reforestation plans, including the rejection of clear-cutting policies and 'salvage logging.' Particular respect must be given to trees in old-growth forests, where species diversity remains at high risk." Lane teaches theological studies at St. Louis University, St. Louis, Missouri. (v.8,#4)


Lane, John and Thurmond, Gerald, eds. The Woods Stretched for Miles: New Nature Writing from the South. Athens, GA: University of Georgia Press, 1999. 256 pp. $40 cloth, $16.95 paper. Essays about southern landscapes and nature from eighteen writers with geographic or ancestral ties to the region. (v.10,#1)


Lang, Tim and Hines, Colin, The New Protectionism: Protecting the Future Against Free Trade. London: Earthscan, 1995. 184 pages. The authors challenge free trade, claiming that, far from its promised benefits, what free trade actually produces is an ever larger gulf between the world's rich and the world's poor, combined with a growing environmental crisis. A better approach is a New Protectionism, not in defense of elitist interests at the national level (as did old protectionism), but in pursuit of the three E's: social and global equity, a sane economy, and a sustainable environment. (v.9,#2)

Lang, Erin R., "Applying Ethics to Engineering," Journal of Professional Issues in Engineering Education and Practice 129(no. 3, 2003):134-136. Features environmental ethics in civil engineering. "This theory of treating animals and the environment with moral consideration was one of the great evolutions impacting the civil engineering profession over the past decades." The American Society of Civil Engineers sponsors an annual student essay contest. In 2003 the theme was ethics in engineering over the past 150 years. This was one of five prize winning student essays. Lang is a student in civil engineering at the University of Pittsburgh at Johnstown.

Lang, Graeme, "Forests, Floods and the Environmental state in China", Organization and
Environment, 15, (No. 2, 2002): 109-30. Deforestation continues in developing countries, despite predictions of ruinous consequences in the 21st century. The state is a poor protector of the environment in most of these countries but is the only agency able to deal with many of the causes of deforestation. This article focuses on the most striking example of state action against deforestation among the developing countries of the world during the past two decades—the ban on logging by the central government of China following the massive floods in 1998. River floods are more devastating in China than anywhere else in the world. This case provides a good opportunity to study state responses to environmental crisis. It illuminates the conditions under which central governments can act forcefully to conserve natural resources in the face of the determination of regional and local actors and authorities to exploit their resources intensively in the drive for economic development. Lang is an associate professor of sociology in the Department of Applied Social Studies at City University of Hong Kong. (v.13, #3)

Lang, Reg and Sue Hendler, "Environmental Ethics: Ethics and Professional Planners," in Don MacNiven, ed., Moral Expertise: Studies in Practical and Professional Ethics (London: Routledge, 1990). With attention to the conflicts between planners and developers, focused on the Ontario Professional Planners Institute. Lang is professor of environmental studies, York University, Toronto. Hendler is in the school of urban and regional planning, Queens University, Kingston, Ontario. (v2,#1)

Lang, Berel. "Earthquake Prediction: Testing the Ground." Environmental Ethics 5(1983):3-19. The occurrence of earthquakes is usually ignored or discounted as an environmental issue, but the environmental relevance of the science of earthquake prediction is demonstrable. The social consequences of such predictions, when they are accurate, and even (once a general pattern of accuracy has been achieved) when they fail, have implications of such varied environmental issues as land-use control, building codes, social and economic costs (for predictions made when no earthquake occurs or for failures to predict earthquakes which do occur). Lay members of the public are more directly involved in programs of earthquake prediction than in almost all other instances of scientific prediction, if only because the scientific findings require public participation in order to have any effect at all. Attention must be paid, accordingly, to the effect of specific public and social values on the practice of earthquake prediction—ranging from such broadly based ones as conceptions of the general relation between man and nature to narrower ones like the cost-benefit analysis of a program of earthquake prediction itself. Because of the close connection between the efficacy of earthquake prediction and public attitudes, moreover, certain questions concerning the social character of "normal" science and the deprofessionalization of scientific institutions are highlighted in this context. Lang is in the department of philosophy, University of Colorado, Boulder, CO. (EE)


Langford, Dale J., et al, "Social Modulation of Pain as Evidence for Empathy in Mice," Science 312(30 June 2006):1967-1970. Mice are found to exhibit enhanced pain sensitivity when they see a familiar fellow cagemate experience pain, but not when the other mouse is a stranger. For example, they hop off a heated area of the cage floor faster. There is "emotional contagion," a primitive kind of empathy that does not require understanding what others are experiencing. The information may be transmitted in part through chemical signals, but seems
mostly transmitted by vision. Langford and his research team are in psychology, in a center for research on pain, at McGill University, Canada.

Langford, Dale J., et al (8 others), "Social Modulation of Pain as Evidence for Empathy in Mice," Science 312(30 June 2006):1967-1970. Mice observing a cagemate in pain seem to empathize when the cagemate is given a noxious stimulus. They develop a "writhing test." With commentary, Miller, Greg, "Signs of Empathy Seen in Mice," Science 312(30 June 2006):1860-1861, and photo of "commiserating mice." With letter of concern by Ernest Gwynn Jordan, "Mice, Pain, and Empathy," Science 314 (13 October 2006):253, asking whether when ethical scientists see mice commiserating with each other in pain, it's time to stop the experiment. The Miller commentary starts: "Empathy is one of the nobler human attributes." Jordan asks: "Must I conclude that it is absent or suppressed in some scientists?" With reply by Jeffrey S. Mogil, one of the authors of the paper, that it is better for mice to suffer than people, and their research might reduce human suffering by learning how commiseration can reduce pain in humans, and that they choose to test with the least pain possible to remain effective in the experiment. So: On with the experiments. The authors are in psychology, McGill University, Montreal.


Langhelle, Oluf. "Sustainable Development and Social Justice: Expanding the Rawlsian Framework of Global Justice." Environmental Values 9(2000):295-323. ABSTRACT: This article makes two arguments. First, that social justice constitutes an inherent part of the conception of sustainable development that the World Commission on Environment and Development outlined in Our Common Future (1987). The primary goal of the Commission was to reconcile physical sustainability, need satisfaction and equal opportunities, within and between generations. Sustainable development is what defines this reconciliation. Second, it is argued that this conception of sustainable development is broadly compatible with liberal theories of justice. Sustainable development, however, goes beyond liberal theories of justice in many respects. It is based on three assumptions, which are for the most part ignored in liberal theories: an accelerating ecological interdependence, historical inequality in past resource use, and the `growth of limits'. These assumptions create a conflict between intra- and intergenerational justice, which is ignored in liberal theories, but which sustainable development tries to solve. It does so by imposing duties on developed countries that goes beyond liberal demands, and by abandoning the focus `solely on protection' that dominates non-anthropocentric approaches to environmental sustainability. Keywords: Biological diversity, climate change, global justice, sustainable development. Oluf Langhelle is at RF - Rogaland Research, P.O. Box 2503 Ullandhaug, 4091 Stavanger, Norway. (EV)

Langhelle, Oluf, and Ornulf Seippel, "Norsk miljofilosofi, 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. (v5,#4)


Langmead, Ross, "Ecojustice Principles: Challenges for the Evangelical Perspective," 
Ecotheology No 5/6 (Jul 98 / Jan 99):162-172.


Langton, Marcia, "What Do We Mean by Wilderness? Wilderness and Terra Nullius in Australian Art." The Sydney Papers, (The Sydney Institute) 8(no. 1, 1996):10-31. (v.9,#3)


Lanza, Robert P., Dresser, Betsy L., and Damiani, Philip, "Cloning Noah's Ark," Scientific American 283 (no. 5, November, 2000): 84-89. A humble Iowa cow is slated to give birth to the first cloned endangered species, a gaur, an ox-like animal now rare in India and listed by IUCN as endangered. The cloned Gaur bull is to be named Noah, in commemoration of the world's first endangered species project. Biotechnology, some biologists claim, might offer the best way to keep some endangered species from disappearing from the planet. One could also wonder if this might not launch another round of the "faking nature" debate. Lanza and Damiani are with Advanced Cell Technology, Worcester, MA, and are conservationists. Dresser is in research at the Audubon Institute Center for Research of Endangered Species, New Orleans. (v.11,#4)

Lapintie, Kimmo, ed. Paradise Lost: Rationality, Freedom, and Ecology in the City. Housing & Environment, No 2. University of Tampere, Department of Social Policy and Social Work, 1996. Lapintie, an architect and philosopher, and also leader of the Ecopolis project, discusses the meaning of the introduction of the ecological terminology and paradigm in planning discourse, and the establishment of the sustainable development ideology in planning methodology. He argues that the basic problem of both ecology and ecological planning is that they heavily lean on traditional paternalistic attitudes. Finnish Academy. "Ecopolis" is a multidisciplinary research project sponsored by the Finnish Academy. Email lapintie@arc.tut.fi. v7, # 3)

Lapintie, Kimmo, and Aspegren, Marjo, eds. Ecopolis Papers: Housing and Environment, No 1.
University of Tampere, Department of Social Policy and Social Work, 1996. In this collection of papers, the researchers of the Ecological City (Ecopolis) Project introduce different levels of problematic in ecological planning and research. Finnish Academy. "Ecopolis" is a multidisciplinary research project sponsored by the Finnish Academy. Email lapintie@arc.tut.fi.


1. Not enough food to go around.
3. Too many people.
4. The environment vs. more food?
5. The green revolution is the answer.
6. We need large farms.
7. The free market can end world hunger.
8. Free trade is the answer.
9. Too hungry to fight for their rights.
10. More U.S. aid will help the hungry.
11. We benefit from their poverty.
12. Curtail freedom to end hunger? (v.10,#1)


Larkin, Lucy, "Turning: Face-to-face with Limobius mixtus," Ecotheology Vol 7 (No. 1, July 2002):45-59. This article elaborates on the themes of creativity, compassion and new forms of relating in regard to human encounters with nature. The example of an endangered weevil, Limobius mixtus, is put forward to argue that the loss of biodiversity results in the diminishment of God. Emmanuel Levinas' use of the image of 'the face' that comes from 'height', Martin Buber's philosophy of 'I and Thou' and feminist theological writing on the breakdown of relationship are all employed in the weaving of a theological tapestry. Sin is defined as the failure to observe one of the 'least', such as the weevil. Our motives in desiring repaired relationships with nature are additionally scrutinised. It is suggested that to be creative, compassionate and to desire right relationships with nature promote a dynamic which ultimately preserves the life of God.


Larrère, Catherine and Raphaël Larrère, Du bon usage de la nature. Pour une philosophie de l'environnement (On the Good Use of Nature: Toward a Philosophy of the Environment). Paris. Aubier, 1997. 355 pages. Much longer than the preceding survey, covering the history of Western philosophy and concluding with the authors' proposal for a plausible and workable environmental ethic. A classical (Greek) view of nature recommended that humans learn from the norms of nature and accept natural limits. The modern world makes nature a realm of passive mechanical interactions, valueless, with humans outside and over nature. The authors, in a third, postmodern view, inscribe humans in nature but not in a privileged position. "Good use today should be ecocentric" (p. 19). Against Luc Ferry, The New Ecological Order, the authors argue that "to face the environmental crisis we do not need only an ethics of responsibility towards future generations but also a new idea, or scientific, ecocentered vision of nature." Shows that environmental ethics is alive and well in France, and also introduces French and European contributions to the debate with which English-speaking philosophers may not be familiar. Catherine Larrère teaches philosophy at the Université Michel de Montaigne, Bordeaux III, in France. Raphaël Larrère an agronomy engineer and director of research at the Institut National de la Recherche Agronomique (INRA). Reviewed by Pete A. Y. Gunter in Environmental Ethics 20(1998):329-344. (v8,#3)

Larrère, Catherine, Les philosophies de l'environnement (Philosophies of the Environment). Paris, Presses universitaires de France, 1997. 124 pages. An overview of largely American environmental philosophy, with discussions of intrinsic value, the land ethic, animal ethics, wilderness and pluralism. Larrère depicts the American environmental debate as involving two opposed tendencies, the search for abstract universal laws (Moralität), and the effort to ground environmental values in the concept of community (Sittlichkeit). The first is an expanded Kantianism, and also found in the animal rights movement. The second is developed in Leopold's land ethics. Catherine Larrère is a philosophy professor and head of the philosophy department at the Université Michel de Montaigne, Bordeaux III, in France. Reviewed by Pete A. Y. Gunter in Environmental Ethics 20(1998):329-334. A good review summarizing her argument is Axel Gossseries, "Environmental Philosophy Debate," Ethics and the Environment 3(1998):111-115. The best introduction in French to environmental philosophy. (v8,#3)


Larrère, Catherine, "La nature est-elle aimable? (Is Nature Loveable)," La Mazarine, Editions du Treize Mars, 12 boulevard Péreire, 75017 Paris, no. 1, automne 1997. The answer depends upon which nature is in question. The article distinguishes between a nature-artefact, that we are responsible for, and a processual nature, that we can love. (v8,#3)


Larrère, Catherine, "La forêt est-elle un objet philosophique?" in La Forêt, les Savoirs et les Citoyens, Editions de l'ANCR/Agence nationale de création rurale. Co Mars 1995, Editions ANCR, 73124 Chalon-sur-Saône cedex. With Descartes, and Rousseau and Heidegger as well, the forest in philosophy is a place one has to go out of. The forest is a metaphor of method, of spatial orientation. This attitude that "one should go out of the forest" becomes a philosophical motto that furthers the modern separation between humans and nature. (v8,#3)


Larsen, Randy, *Environmental Virtue Ethics: Nature as Polis*. M. A. thesis at Colorado State University, Spring 1996. Virtue ethics, developing the Aristotelian tradition, has promise for environmental ethics, although Aristotle's list of virtues needs to be supplemented with environmental ones. "Tenacity" can serve environmentalists, avoiding extremes of "apathy" and "obsession," finding a balance between the existential experience of nature and advocacy for environmental conservation. John Muir is an example of a successful holder of this environmental virtue. Larsen is currently the host on a radio talk show, "Ecotalk," on station KZFR serving the area around Chico, California. He teaches in a community college there. (v6,#4)

Larson, Brendon M. H. AThe Social Resonance of Competitive and Progressive Evolutionary Metaphors. @ *BioScience* Vol. 56, no. 12 (2006): 997-1004. Metaphors of competition and progress have played a key role in the scientific conception and public understanding of evolution. These scientific and public aspects have been in continual tension, however, since these metaphors have been broadly interpreted in the social realm despite scientists' attempts to isolate their meaning. To examine how this occurs, I conducted a Web survey of evolutionary biologists (Society for the Study of Evolution), evolutionary psychologists (Human Behavior and Evolution Society), biology teachers (National Association of Biology Teachers), and members of a Teilhardian spiritual organization (Foundation for Conscious Evolution) (N = 3D 1892 respondents). Respondents were asked to evaluate the scientific and social dimensions of 18 evolutionary statements with metaphorical elements, including arms race, complexity, cooperation, drift, intelligent design, progress, selfish gene, sperm competition, and struggle for survival. The responses generally confirmed the demise of a progressive view of evolution, whereas competitive metaphors remained popular even though respondents indicated that they had a negative social resonance. The survey reveals how biological metaphors retain connections to everyday understanding, which has implications for teaching biology and for thinking about how biologists may unwittingly endorse particular social policies with their metaphors.

Laschefski, K; Freris, N, "Saving the wood from the trees Is tropical timber certification the saviour of the rainforests," *Ecologist* 31(no. 6, 2001):40-43. (v.13,#1)

Lash, Jonathan, "Towards a Sustainable Future," *Natural Resources and Environment* 12 (Fall 1997):83-. (v.8,#4)


Latour, Bruno, *We Have Never Been Modern*. Cambridge: Harvard University Press, 1993. 157 pages. paper. Only the modern West has conceptually separated culture from nature; no other cultures have ever done so. That is, in fact, the defining characteristic of modernity: "it believes in the total separation of humans and nonhumans" (p. 37). "Our own mythology consists in imagining ourselves as radically different" (p. 114). At the same time we in the West construct massive "hybrids" of culture and nature--the ozone hole, global warming, deforestation--and are unable to recognize the root of the problem because our ideology, driving science, technology,
and politics, separates humans from nature when in fact they must and do entwine. In achieving this separation, "no one has ever been modern. Modernity has never begun. There has never been a modern world" (p. 47) "It behooves us to ... become once more what we have never ceased to be: amoderns" (p. 90). The answer is not in being postmodern, but in being amodern (p. 131). This will retain "the premoderns' inability to differentiate durably between the networks and the pure poles of Nature and Society" (p. 133). Pure culture does not exist, nor does pure nature, nor is anything singular. "There are only natures-cultures" (p. 104). Latour is a sociologist at Ecole Nationale Supérieure des Mines, Paris, and at the University of California, San Diego. (v7,#2)

Latour, Bruno, Politics of Nature: How to Bring the Sciences into Democracy. Cambridge, MA: Harvard University Press, 2004. Latour, the controversial deconstructor (social reconstructor) of science now constructs his environmental ethics, or at least, environmental policy. Latour's argument, as usual, is complex and idiosyncratic. The dichotomy between nature and society, between the world and our representations of it, is false. There is no separation between science and nature, for nature is itself a concept that results from certain kinds of scientific and social framings. So, for that matter, are science and society. These concepts are interdependent and must be understood collectively. There is a real world, but it is not "out there."

To address ecological damage and destruction, we have first to acknowledge and then reject the false separations we have heretofore accepted. That means most environmental movements have been wrong. "Under the pretext of protecting nature, the ecology movements have also retained the conception of nature that makes their political struggles hopeless. Because `nature' is made ... precisely to eviscerate politics, one cannot claim to retain it even while tossing it into the public debate." Latour proposes replacing this bifurcated world with a collective based on civil collaboration between humans and nonhumans.

Meanwhile Latour seems also to hold that in this collective collaboration, nonhumans have to be considered equally with humans. We must extend Kant's categorical imperative to treat the nonhuman world as ends rather than means. We have to take seriously the needs, interests, desires of nonhumans. But just how we know these nonhuman values "out there" without constructing them is left unclear. Reviewed by Naomi Oreskes, "A Call for a Collective," Science 305(27 August 2004):1241-1242. (v.14, #4)


Lauber, V. "The Austrian Greens after the 2002 Elections," Environmental Politics 12(no.3, 2003):139-144. (v.14, #4)


Lauerman, John F., "Animal Research," Harvard Magazine 101 (no. 1, 1999):48-57. Mice and medicine: The rights of humans and animals. A report from the laboratories and the animal-rights community. Some spokesmen: "You could also say that you couldn't have settled the South without slavery. Would you still do it that way today? Just because something seemed acceptable at the time is not to say that we should do it in our time" - Neal Barnard. "It is very easy to say that it is wrong to cause the death of another living animal. The difficulty comes in saying, 'I understand what I'm doing is causing the death of a limited number of animals. But I'm making a judgment that the results will justify doing the study.'" - Norman Letvin. (v.9,#4)


ABSTRACT: Over the last few decades mounting evidence has suggested that the Earth is facing an environmental crisis unprecedented in its scale and causation. The crisis threatens the continued well-being of humanity as well as much of the biodiversity of the planet. It is largely caused by unsustainable behaviour of Homo sapiens. Underlying human behaviour are beliefs, values and structural constraints that shape people’s concepts of progress. The emerging global culture manifests a particular concept of progress that is based on harmful beliefs and largely counterproductive values. Within that value base, the counterproductive influences tend to arise from anthropocentric values and assumptions, which are incompatible with sustainable living. The most effective approach to accomplish a cultural change of such magnitude is through educational reform. This thesis provides an educational blueprint for changing those anthropocentric values and assumptions and to introduce a moral shift towards ecocentrism. A large-scale reform at many levels of current educational practice is required to ensure that learners acquire the moral, scientific, interpretive and emancipatory knowledge to build a sustainable future for humanity and its home.


The popular stereotype of ecologists appears somewhat at odds with the ideal of the objective, detached, morally disinterested researcher. Ecologists tend to subscribe to this ideal, as do most natural scientists. This puts the stereotype into question. To what extent and in what respects can ecologists be regarded as motivated by environmentalist values? What other values might contribute to their motivations? The answers to those questions have bearing on how policy makers perceive the input they receive from ecologists and it has long-term implications for the funding of ecological research. To obtain some answers I analysed over fifty randomly selected publications of ecologists for explicit and implicit value statements. The analysis revealed an abundance of value statements. However, no bias was evident towards a conservationist or ecocentric environmental ethic such as suggested by the stereotype. I will suggest some explanations and ramifications of these results that take into account the ecologist’s professional situation. Lautensach is in biology, University of Auckland, New Zealand. (EV)


Law in the New Age of Biotechnology. Environmental Law Centre, 201, 10350-124 St., Edmonton, Alberta T5N 3V9, Canada. Canadian $ 42.75. (v4,#1)

Lawler, Andrew, "Stormy Forecast for Climate Science," Science 305(20 August 2004):1094-
Climate researchers are facing a confused and perilous future, much of it surrounding NASA's Earth Observing System. Weather forecasters and climate forecasters often need different data; different government agencies are involved, such as, in the U.S., NASA and NOAA. The work is fragmented and underfunded. International cooperation for global data is even more fragmented and underfunded. And climate scientists claim their work is more important for national and global security (more long-term threat to humans) than is the military or terrorist threat. (v. 15, # 3)


Lawrence, R. D., The White Puma (New York: Henry Holt). Canadian naturalist R. D. Lawrence, who once spent ten months tracking and observing a puma, has written a novel told largely from the point of view of a puma in the wilds of British Columbia and bearing an important environmental and political message. The story follows the life of an unnamed puma, born with a pure white coat, from birth through a life of persecution by humans. His mother and young litter mate are killed by hunters. Wealthy European hunters lust after his pelt and will pay thousands of dollars for a chance to shoot him. The puma learns to fear and then to hunt his human adversaries. The White Puma reminds the wise species that there are other intelligent and worthwhile beings to consider. (v1,#2)

Lawton, John H., "Conservation Biology: Where Next?" Society for Conservation Biology Newsletter 9 (no. 4, 2002):1-2. "Finally, the biggest challenge of all is that we live in a world in which the gap between the minority of 'haves' and the majority of 'have nots' is growing ever wider. We live in a desperately unfair, unequal world. Effective conservation is impossible in the face of grinding human poverty on the one hand, and blinding human greed on the other. More effective conservation of Earth’s biological riches will not happen without sustainable development, the stabilization of the global population, and social justice, for all nations.” Lawton is Chief Executive, Natural Environment Research Council, UK, and at Imperial College, London. (v.13,#4)


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. (v5,#4)

Lea, David R., "Melanesian Axiology, Communal Land Tenure, and the Prospect of Sustainable Development Within Papua New Guinea", Journal of Agricultural and Environmental Ethics 6(1993):89-102. It is the contention of this paper that some progress in alleviating the social and environmental problems which are beginning to face Papua New Guinea can be achieved by supporting traditional Melanesian values through maintaining the customary system of communal land tenure. In accordance with this aim I will proceed to contrast certain Western attitudes towards "individual freedom", "self-interested behavior", "individual and communal interests" and "private ownership" with attitudes and values expressed in the traditional Melanesian approach. I will describe how the emergence of a cash economy and the attachment to Western gadgetry and products have effected injury to the environment and undermined values which have previously maintained Melanesian social cohesion. Lea is in psychology and philosophy at the University of Papua New Guinea, Papua New Guinea.


Leahy, Michael P. T., Against Liberation: Putting Animals in Perspective. London and New York: Routledge, 1991. 273 pages. Concern for the rights of animals is based on a series of fundamental misconceptions about the basic nature of animals, which tend to identify them rationally, emotionally, and morally far too closely with ourselves. Leahy is in philosophy at the University of Kent. (v4,#3)


Leal, Donald, R. "Community-Run Fisheries: Avoiding the Tragedy of the Commons." Bozeman, MT: PERC Policy Series, No. PS-7, September 1996. (Address: 502 South 19th Ave, Suite 211, Bozeman, MT 59715 USA. Phone 406/587-9591. Fax 406/586-7555). Fish populations in many coastal areas of the United States and Canada continue to decline, despite government regulations. Communities who mainstay is fishing appear powerless to control the tragedy of destructive overfishing. But such as tragedy of the commons is not inevitable, and there are many communities that have effectively protected their fishing territories and preserved fish for the future. Fishing areas can be protected from overfishing with minimal government involvement. Leal is the coauthor with Terry L. Anderson of Free Market Environmentalism. (v7, #3)

Lear, Linda, Rachel Carson: Witness for Nature. 1997. New York: Henry Holt and Company, 1997. 634 pp. $17.95, paper. $35.00, cloth. The first comprehensive biography of the great naturalist. Two themes recur repeatedly: (1) the hurdles she had to overcome as a woman in the masculine worlds of science, government and the professions. Carson pursued and ultimately abandoned work towards a Ph.D. in biology. (2) Her tenacity as a writer, culminating in Carson’s struggle to write Silent Spring, and the political firestorm the book ignited. Despicable
attempts by chemical and agribusiness interests to slander Carson and discredit her work. She pressed her cause in the face of family tragedy and failing health, one of the heroic stories in conservation history. See also:


Lear, Linda, Rachel Carson: Witness for Nature. New York: Henry Holt, 1997. 640 pages. $35. Carson died in 1964, aged 57, and one of the most famous people in America, but her personal life is little known. She was employed full-time at the U.S. Fish and Wildlife service, but had heavy family responsibilities—her mother, her sister, her nieces, and, ultimately, her grandnephew, whom she adopted—all the while trying to find a few hours for her work, driven by her sense of the importance of her subject—first the sea, and then life itself. She was ill throughout the writing of Silent Spring. Carson prospered in adverse circumstances; she also changed the circumstances of everyone who came after her. "For Carson, nature writing and popular science writing were vehicles of human redemption." Lear teaches at George Washington University. (v8,#3)


Leary, Neil, Cecelia Conde, Anthony Nyong, and Juan Pulhin, eds. Climate Change and Vulnerability. London: Earthscan Publications, 2008. The authors in this anthology discuss who is vulnerable to climate change, the nature of their vulnerability, and the causes of their vulnerability for parts of the world that have been poorly researched until now. Contents include: (1) AFor whom the bell tolls: Vulnerabilities in a changing climate@ by Neil Leary, James Adejuwom, Wilma Bailey, Vincente Barros, P. Baltima, Rubén M. Caffera, Suppakorn Chinvanno, Cecilia Conde, Alain De Comarmond, Alex De Sherbinin, Tom Downing, Hallie Eakin, Anthony Nyong, Maggie Opondo, Balgis Osman-Elasha, Rolph Payet, Florencia Pulhin, Juan Pulhin, Janaka Ratnisiri, El-Amin Sanjak, Graham von Maltitz, Mónica Webbe, Yongyuan Yin, and Gina Ziervogel, (2) AVulnerability of southern Africa biodiversity to climate change@ by Graham P. von Maltitz and Robert J. Scholes, (3) AForest responses to changing rainfall in the Philippines@ by Rodel Lasco, Florencia Pulhin, Rex Victor O. Cruz, Juan Pulhin, Sheila Roy, and Patricia Sanchez, (4) AVulnerability of Mongolia—pastoralists to climate extremes and changes@ by Punsalmaa Batima, Luvsan Natsagdorj, and Nyamsurengyn Batnasan, (5) AResource system vulnerability to climate stresses in the Heihe river basin of western China@ by Yongyuan Yin, Nicholas Clinton, Bin Luo, and Liangchung Song, (6) AStorm surges, rising seas and flood risks in metropolitan Buenos Aires@ by Vincente Barros, Angel Menéndez, Claudia Natenson, Roberto Kokot, Jorge Codignotto, Mariano Re, Pablo Bronstein, Inés Camilloni, Sebastián Ludeuñia, Diego Río, and Silvia González, (7) AClimate and water quality in the estuarine and coastal fisheries of the Río de la Plata@ by Gustavo J. Nagy, Mario Bidegain, Rubén M. Caffera, Frederico Blixen, Graciela Ferrari, Juan J. Lagomarsino, Cesar H. López, Walter Norbis, Alvaro Ponce, Maria C. Presentado, Valentina Pshennikov, Karina Sans, and Gustavo Sención, (8) AClimate change and the tourist dependent economy of the Seychelles@ by Rolph Antoine Payet, (9) AHousehold food security and climate change: Comparisons from Nigeria, Sudan, South Africa and Mexico@ by Gina Ziervogel, Anthony Nyong, Balgis Osman-Elasha, Cecilia Conde, Sergio Cortés, and Tom Downing, (10) AVulnerability in Nigeria: A national-level assessment@ by James D. Adejuwom, (11) AVulnerability in the Sahelian zone of northern Nigeria: A household-level assessment@ by Anthony Nyong, Daniel Dabi, Adebowale Adepetu, Abou Berthe, and Vincent Ihemegbulem, (12) ALivelihoods and drought in Sudan@ by Balgis Osman-Elasha and El-Amin Sanjak, (13) ASocial

Leax, John, Standing Ground: A Personal Story of Faith and Environmentalism. Grand Rapids, MI: Zondervan, 1991. 127 pages. $7.99. A personal account of one man's stand against the building of a nuclear dump near his home. The moral conflicts, fears, angers, and questions Leax faced as he came to terms with the responsibilities of being a steward of the earth. (v6,#4)

LeBlanc, Jill. "Eco-Thomism." Environmental Ethics 21(1999):293-306. St. Thomas Aquinas is generally seen as having an anthropocentric and instrumentalist view of nature, in which the rational human is the point of the universe for which all else was created. I argue that, to the contrary, his metaphysics is consistent with a holistic ecophilosophy. His views that natural things have intrinsic value and that the world is an organic unity in which diversity is itself a value requiring respect for being and life in all their manifestations. (EE)

LeBlanc (Le Blanc), Jill, "A Mystical Response to Disvalue in Nature," Philosophy Today 45(2001):254-265. Holmes Rolston's account of disvalues in nature is too rationalized; it does not speak to the distress of the individual pained by the stresses of nature. For this one needs a mystical, experiential response, which involves loving all things and doing all one can to alleviate such disvalue in the world. Le Blanc is at McMaster University, Hamilton, Ontario. (v.13,#2)

LeBreton (Le Breton), Binka. A Land to Die For. Atlanta: Clarity Press, 1997. 151pp. $12.95. Recounting the events surrounding the assassination of Padre Josimo, a black priest internationally recognized for his role in the struggle of impoverished squatters for land, LeBreton captures the grass roots view of the turbulent social fabric of rural Brazil–large landowners, wealthy speculators, politicians, pistoleiros, peasants, and on both sides, the Catholic Church, torn between ancient ritual and contemporary liberation theology, heeding the cries of the poor and calling for justice. Le Breton is a British journalist who lives with her husband in an isolated area of southeastern Brazil. (v8,#3)

Leclerc, Jacques; DesGranges, Jean-Luc, "Exploratory multiscale analysis of the fish assemblages and habitats of the lower St. Lawrence River, Quebec, Canada," Biodiversity and Conservation 14(no.5, May 2005):1153-1174(22).

validly appreciated through various cultural media including science, technology, mythology, and, in particular, the arts. Those who attack arts-based appreciation mainly think about the arts of the nineteenth century: traditional landscape painting and sculptures on pedestals. When we turn to art since the 1970s, for example, earth art, this picture changes. Allen Carlson's attack on postmodernist and pluralist models of aesthetic appreciation does not pose significant problems for an arts-based approach, for he makes a major concession to non-scientific culture-based approaches when he allows mythological descriptions. If mythology can be taken into consideration when appreciating the natural environment, then the arts should be as well. The aesthetic object in environmental aesthetics is emergent from, and upon, the interaction of the experiencing subject(s) and the appreciated environment, the limits of which are set by the experiencing subject(s). These limits need not be narrowly science-based. (EE)

Ledoux, Arthur O., "A Green Augustine: On Learning to Love Nature Well," Theology and Science 3 (no. 3, 2005): 331-344. Augustine of Hippo has expressed a vision of beauty in nature that could, if better known, encourage traditional Christians and secular ecologists to affirm the ground they have in common. For Augustine the ideal would be to see nature as God sees it, feeling deeply both its beauty and its impermanence, loving nature without clinging to it. With such clear seeing would come love and the motivation for sustained and skillful action. Ledoux is in philosophy, Center for Augustinian Study and Legacy, Merrimack College, North Andover, MA.

Leduc, Thomothy B., Approaching a Climatic Research Etiquette, Ethics and the Environment 12(no. 2, 2007):45-70. This paper examines the way in which climate change's complexity calls forth dialogue on various cross-cultural dimensions which resonate with its multi-dimensional reality. While the IPCC science and the Kyoto Protocol approach this inclusiveness, they ultimately limit the range of voices heard due to the continuation of cultural assumptions that are intertwined with many environmental issues. Following the Earth Charter as an alternative model of cross-cultural dialogue that can inform a methodological approach of climate change, this analysis suggests that a more inclusive sharing can offer a way of attending to limiting assumptions as a means to creating viable regional and global responses. This climatic research etiquette is clarified through focusing upon the continued dominance of economic scarcity and its religious precursor, original sin, in contemporary environmental thought. Leduc is a Ph.D. candidate, Faculty of Environmental Studies, York University, Toronto.

Lee, Donald, "A Hierarchical Ethical Theory Based on the Ecological Perspective" Philosophical Inquiry 8, nos. 1-2 (Winter-Spring 1986):111-123. Argues that we need a theory which prescribes different levels of value for different kinds of entities. (Katz, Bibl # 1)

Lee, Donald C. "Toward a Marxian Ecological Ethic: A Response to Two Critics." Environmental Ethics 4(1982):339-43. To the claim that Marx has no concept of human nature after 1845 and is not prescriptive, I reply that his work only makes sense in the light of his definition of the human being as creator and producer of himself through his own productive activity; otherwise, there is no reason that labor should "naturally" belong to the laborer, since other animals live from each other's labor and exploitation is natural. Marx's rejection of exploitation is an ethical principle. On the other hand, I attack the narrow human chauvinism of Marxists which lacks environmental consciousness and concern for other species; I label it "eco-imperialism." Marx had several important insights, but his work in general was not always free of the limitations of his age; I try to point to those insights most instructive in our time with regard to the problems of environment. Lee is in the department of philosophy, University of New Mexico, Albuquerque, NM. (EE)

Lee, Donald C. "Some Ethical Decision Criteria with Regard to Procreation." Environmental Ethics 1(1979):65-69. A response to Daniel Callahan's claim that although population growth has been a longstanding value it now poses a threat to human beings as well as to ecosystemic health. With particular attention to the rank ordering of freedom and the right to procreate. One does not
have a right to procreate to unlimited procreation that threatens the very survival of the species. Lee is in the department of philosophy, University of New Mexico, Albuquerque, NM. (EE)


Lee, Donald C. "On the Marxian View of the Relationship between Man and Nature." Environmental Ethics 2(1980):3-16. Marx holds that mankind has developed from nature and in mutual interaction with nature: nature is not an "other" but is man's body. Capitalism is a necessary stage in mankind's historical development of the mastery of nature, but it regards nature as an "other" to be exploited. Thus, a further historical development is necessary: the overcoming of the dichotomy between man as subject and nature as object. Capitalism bases its concept of wealth on unnecessary production rather than on socially useful production and on the maximization of true leisure and free and creative activity for all. It creates excess pollution and depletes nonrenewable resources as a result of this wasteful, exploitative, unnecessary production. A Marxian solution to environmental problems involves the replacement of capitalism with a rational humane, environmentally unalienated social order. Unfortunately, the actual practice of Marxism has not generally been in accord with its own theory. Such rational, humane social orders have not yet been instituted, but they must be soon. We must take one aspect of Marx's ideas to its logical conclusion: Marxist practice has been, at best, homocentric, but now it must overcome that limitation and truly see nature as our "body." Marxism must become ecologically aware; mankind must become the steward of its "body": the ecosystem upon which it depends and which now depends upon it for its health (homeostasis). Lee is in the department of philosophy, University of New Mexico, Albuquerque, NM. (EE)


Lee, Kai N., "Sustainability, Concept and Practice Of," Encyclopedia of Biodiversity 5: 553-568. Biodiversity is dependent on sustainable utilization of the natural world by humans, and the conservation of biodiversity may well be essential to the durability of the human species. Is a sustainable economy possible? Recent scientific appraisals suggest that it is but that a transition toward sustainability will require significant social, political, and technological changes during the next two generations. This is also the time period in which human population seems likely to level off; hence, it is possible to think of a sustainability transition on the timescale of the demographic transition drawing to a close during the twenty-first century. (v.11,#4)

Lee, Kai N., Compass and Gyroscope: Integrating Science and Politics for the Environment. Washington: Island Press, 1993. 290 pages. $ 25.00 hardcover. Rigorous science can be the compass and practical politics can be the gyroscope. Uses the Columbia River Basin in the Pacific Northwest as a case study. "Sustainable development is not a goal, not a condition likely
to be attained on earth as we know it. Rather it is more like freedom or justice, a direction in which we strive." (v4,#3)

Lee, Keekok, Holland, Alan, and McNeill, Desmond, eds., Global Sustainable Development. Edinburgh: Edinburgh University Press. Explores some of the complexities surrounding sustainable development in terms of the concept itself as well as at the level of implementation and policy. Challenges facing those who wish to invoke the notion both in their thinking and their planning, whether in the developing South or the developed North. The contributors, coming from different parts of the world, from very different backgrounds and disciplines bring their own distinctive perspective to bear on the issues they have respectively identified as relevant and crucial. Lee and Holland are at the University of Lancaster. McNeill is at the University of Oslo. (v.11,#3)

Lee, Keekok, "An Animal: What is it?," Environmental Values 6(1997):393-410. ABSTRACT: This paper will argue that posing the question what is an animal? is neither irrelevant nor futile. By looking more closely at four conceptions of what is an animal as held implicitly by the general public, by certain philosophers of animal liberation, by apologists for zoos and by the community of zoologists, it will attempt to show that the first three are partial and decontextualised. On the other hand, the zoological account is obviously more comprehensive, and it will be argued that, if suitably teased out, it involves a properly contextualised conception set against the notions of species, habitat, ecosystem and of evolutionary processes in the past (as well as the future). Such a rounder and more historical characterisation will transcend the usual polarisation between so-called individualism and holism in environmental philosophy. The transcendence of this perceived dichotomy is shown also to have practical implications for environmental policy-making with regard to issues like biodiversity and the saving of animals from extinction. Department of Philosophy University of Manchester, Manchester, UK. (EV)

Lee, Keekok, "The Source and Locus of Intrinsic Value," Environmental Ethics 18(1996):297-308. In the literature of environmental philosophy, the single most potent argument that has been made against the claim that nature may possess intrinsic value in any objective sense is the Humean thesis of projectivism and its associated view that human consciousness is the source of all values. Theorists, in one way or another, have to face up to this challenge. For instance, J. Baird Callicott upholds this Humean foundation to modern Western philosophy. However, by distinguishing between the source and locus of value, he makes it possible to argue that nature is the locus of intrinsic value without at the same time compromising the thesis that human consciousness is the source of all values. On the other hand, Holmes Rolston, III, another eminent environmental philosopher, criticizes the distinction as well as challenges the Humean foundation itself. In this article, I attempt to resolve the disagreement between Callicott and Rolston over this particular distinction, thereby doing justice to the insights which each theorist, undoubtedly, has brought to bear on the issue of intrinsic value, at least as far as individual organisms is concerned. However, I am also critical of both for having failed to draw out the full implications behind certain crucial distinctions that should be made about the notion of intrinsic value itself. Lee is in philosophy, University of Manchester, UK. (EE)

Lee, Keekok, The Natural and the Artefactual: The Implications of Deep Science and Deep Technology for Environmental Philosophy. Lanham, MD: Lexington Books (Rowman & Littlefield), 1999. Pages 288. ISBN 0-7391-0061-0. $35.00 cloth. Focuses on ontology in the ongoing debates in environmental philosophy, by making the distinction between the natural and the artefactual. Argues that the crisis facing our kind of industrial civilisation is not so much ecological as ontological in character. Science and technology are dynamic; while extant or older technologies are indeed polluting, newer ones or those on the horizon would be increasingly less so.

Technological fixes, however, of this kind mask the true nature of the reality facing us--the sunrise technologies (like biotechnology), are nature-replacing, rather than nature-saving
technologies. The price we are being asked to pay for a cleaner environment via such technologies will be the elimination of nature as the ontological other. In other words, our science and our technology increasingly allow us to systematically transform the natural to become the artefactual—the ultimate outcome would be a narcissistic civilisation where nearly everything around us is nothing but the product of human intentions, designs and ends. What we admire then would no longer be nature’s creativity and ingenuity but our own human creativity and ingenuity.

In order to grasp the radical powers of today’s technologies and those in the near future, one must also grasp the complex relationships between science and technology in the past and in modern times. These may be explored in turn in the relationships between the history and philosophy of science on the one hand and the history and philosophy of technology on the other.

Lee challenges one of the central assumptions of contemporary environmentalism: that if we could reduce or eliminate pollution, we could "save" the planet without unduly disrupting our modern, industrialized societies. Lee argues instead that the process of modernization, with its attendant emphasis on technological innovation, has fundamentally transformed "nature" into just another man-made "artefact." Ultimately, what needs to be determined is whether nature has value above and beyond human considerations, aesthetic, spiritual, or biological. Provocative, a revolutionary attempt to reconfigure environmental ethics, positing the existence of two separate ontological categories - the "natural" and the "artefactual." Natural entities, whether they are organisms or inert matter, are "morally considerable" because they possess the ontological value of independence, whereas artefacts are created by humans expressly to serve their interest and ends.

Contents:

--Chapter: 1. Worldviews: Modern and Pre-modern Modernity; The Old Philosophy and the Old Science; The New Science and Its Method, includes Modern Science and the History of Technology; Transforming the Natural to Become the Artefactual.
2. Modern Technology, the Philosophy of Technology, and the Philosophy of Science.
Chapter 3: Independence, Human Design and Artefacticity, including the Natural: Different Senses of ‘Nature’ and the End of Nature?
Chapter 4: Technology: Threats to the Natural, Extant Technology and the Less Radical Threat to the Natural, including the Humanization of Nature, and the Naturalization of Humanity.
Chapter 5: Ontology and Axiology, Abiotic Nature and Intrinsic Value.
Appendix 2: Is Nature a Mere Social Construct?

Lee, formerly at the University of Manchester, is now a researcher at the University of Lancaster, UK. Reviewed by Y.S. Lo. Environmental Values 9(2000):254.

Lee, Keekok. Social Philosophy and Ecological Scarcity (London and New York: Routledge, 1989). Lee, a philosopher at the University of Manchester, intends this work as the first systematic study of the implications of ecological scarcity for social philosophy. She finds neither of the two major competing social philosophies (capitalism and Marxist socialism) to be adequate, but recognition of the ecological crisis should lead to a frugal mode of socialism which makes fewer, rather than more demands on the absolutely scare ecological resources. (v1,#2)

Lee, Keekok. "Beauty for Ever?" Environmental Values 4(1995):213-225. This paper is not primarily about the philosophy of beauty with regard to landscape evaluation. Neither is it basically about the place of aesthetics in environmental philosophy. Rather, its aim is to argue that while aesthetics has a clear role to play, it cannot form the basis of an adequate environmental philosophy without presupposing that natural processes and their products have no role to play independent of the human evaluation of them in terms of their beauty. The limitations, especially of a subjective aesthetics, are brought out through examining the decision of the National Trust in the Lake District to restore Yew Tree Tarn, thereby 'to ensure its beauty will be permanent'. But should a landscape (an ecosystem for that matter) be 'frozen' against natural changes in order that its beauty be preserved 'permanently'? If not, what counter
principle(s) can one invoke to argue against such a philosophy of management or at least to limit such intervention in its name? The National Trust is committed 'to preserving the beauty and unique character of the Lake District'. Its unique character includes its geological formations which make the area beautiful. But geological processes are dynamic. Should their products necessarily be subordinated to aesthetic considerations? If so, are they not in danger of being treated like a work of art, an artefact which we, humans, are entitled to preserve against change? In a conflict between the requirement of conserving beauty of the landscape on the one hand and natural processes at work which might undermine that beauty on the other, should aesthetic considerations always have priority? However, the restoration of Yew Tree Tarn as opposed to the failure in Yosemite to intervene to prevent one of its lakes from drying out are merely used as handy examples to lead into such theoretical exploration which should, most certainly, not be interpreted as a general indictment of the overall management policies of the National Trust on the one hand, or endorsement of those of the Yosemite National Park on the other. KEYWORDS: natural beauty, geological, processes, products, subjective aesthetics, nature as a work of art. Lee is at the Centre for Philosophy and Environment, University of Manchester. (EV)

Lee, Keekok. "Instrumentalism and the Last Person Argument." Environmental Ethics 15(1993):333-44. The last person, or people, argument (LPA) is often assumed to be a potent weapon against a purely instrumental attitude toward nature, for it is said to imply the permissible destruction of nature under certain circumstances. I distinguish between three types of instrumentalism--strong instrumentalism (I) and two forms of weak instrumentalism: (IIa), which includes the psychological and aesthetic use of nature, and (IIb), which focuses on the public service use of nature--and examine them in terms of two scenarios, the apres moi, le deluge and the "ultimate humanization of nature" scenarios. With regard to the first, I show that LPA is irrelevant to all the three versions of instrumentalism. With regard to the second scenario, I show that even though it is redundant insofar as (I) is concerned and irrelevant insofar as (IIa) is concerned, it is, surprisingly, effective against (IIb), despite the fact that as a form of weak instrumentalism it is not the target of LPA. In addition, I examine the implications of LPA for the three variants when it is applied to the preservation rather than the destruction of nature and conclude that LPA is effective against (I) and (IIb), but not as effective against (IIa), which can recognize a permission, though not a duty, to save nature. Lee is in the department of philosophy, University of Manchester, Manchester, U.K. (EE)


Lee, Martha F., Earth First! Environmental Apocalypse. Syracuse, NY: Syracuse University Press, 1994. 224 pages. Paper, $ 16.95. "The beliefs and strategies of the radical underground environmental movement Earth First! ... the apocalyptic doctrine of the group, an extremism which has often led them to indulge in some spectacular, dangerous, and often illegal activities."


Lee, Wendy Lynne, "On Ecology and Aesthetic Experience: A Feminist Theory of Value and Praxis," Ethics and the Environment 11(2006):21-41. My aim is to develop a feminist theory of value—an axiology—which unites two notions that seem to have little in common for a theorizing whose ultimate goal is justice-driven emancipatory action, namely, the ecological and the aesthetic. In this union lies the potential for a critical feminist political praxis capable of appreciating not only the value of human life, but those relationships upon which human and nonhuman life depend. A vital component of this praxis is, I argue, the potential for an aesthetic experience whose value is exemplified in those actions that tend to foster respect for biodiversity and ecological stability. Lee is in philosophy, Bloomsburg University of Pennsylvania. (Eth&Env)


Lee-Lampshire, Wendy, "Anthropomorphism Without Anthropocentrism: A Wittgensteinian Ecofeminist Alternative to Deep Ecology," Ethics and the Environment 1(no.2, 1996):91-102. While articulating a philosophy of ecology which reconciles deep ecology with ecofeminism may be a laudable project, it remains at best unclear whether this attempt will be successful. I argue that one recent attempt, Carol Bigwood's feminized deep ecology, fails in that, despite disclaimers, it reproduces important elements of some deep ecologist's essentializing discourse which ecofeminists argue are responsible for the identification with and dual oppression of women and nature. I then propose an alternative model for conceiving and describing human and nonhuman nature modeled on Wittgenstein's remarks concerning anthropomorphizing which I argue is immune to this criticism. Lee-Lampshire teaches philosophy at Bloomsburg University of Pennsylvania. (E&E)

Lees-Haley, Paul R. "Manipulation of Perception in Mass Tort Litigation," Natural Resources & Environment 12(no.1,1997):64. (v8,#3)

Leeson, S., "The Need for Growth Promoting Compounds in Poultry Meat Production", Journal of Agricultural and Environmental Ethics 4(1991):89ff. Modern strains of broiler chicken are capable of achieving a 2.4 kg liveweight at 42d of age. This extremely fast growth is accomplished in part by balanced diets containing pharmaceutical growth promoting compounds. Over the last few years, a number of ethical questions have arisen regarding the use of such compounds. Such fast growth rate is accompanied by reduced bird welfare related to morbidity and mortality of a proportion of the birds. In two trials we have shown that acceptable growth rate can be achieved in diets without these compounds, and that economics of production are not adversely affected. It is concluded that future management programs for broiler chickens should consider a tempering of growth rate and that this could lead to improved bird well-being.


Lehman, Donna. What on Earth Can You Do? Making Your Church a Creation Awareness Center. Scottdale, PA; Waterloo, ON: Herald Press/Mennonite Publishing House, 1993. 192 pages. $9.95, $12.95 Canada; paper. Directed toward congregations, this book offers practical ways small groups or individuals can get involved and make a difference. (v5,#2)
Lehman, Hugh, Clark, E. Ann, and Weise, Stephan F., "Clarifying the Definition of Sustainable Agriculture", Journal of Agricultural and Environmental Ethics 6(1993):127-144. A number of distinct definitions of sustainable agriculture have been proposed. In this paper we criticize two such definitions, primarily for conflating sustainability with other objectives such as economic viability and ecological integrity. Finally, we propose and defend a definition which avoids our objections to the other definitions. Lehman is in philosophy at the University of Guelph, Ontario. Clark and Weise are in crop science at the University of Guelph, Ontario.


Lehman, Hugh, "Are Value Judgments Inherent in Scientific Assessment?", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. This paper is divided into three parts. In Part I, I discuss the view of Bernard Rollin on the question posed in the title of the paper. To reply to the position taken by Rollin a critic would need to make a distinction between value commitments made in the social context within which people do science from possible value commitments of science itself. Since investigating that distinction would take us far afield, in Part II, I make and defend an assumption concerning scientific method. If there are value commitments of science itself, we should be able to indicate what they are by reference to our description of scientific method. In Part III, I argue that value commitments do enter into the application of scientific method at each stage and so are indeed inherent in science itself. Further, I shall suggest here that conflicts concerning the nature of scientific method reflect, in part, conflicts among scientists and other people with regard to what values can be considered to be values of science itself. As part of this discussion I will also call attention to the grain of partial truth which is reflected in scientists' claims that science is value free. Lehman is in the Department of Philosophy, University of Guelph, Guelph, Ontario Canada N1G 2W1.

Lehman, Hugh, "On the Moral Acceptability of Killing Animals", Journal of Agricultural Ethics 1(1988):155-162. In this paper we argue that, even if we grant the basic assumptions of a "rights view" (killing of animals if they are innocent threats or shields or are in a "lifeboat situation"), a good deal of killing of animals for food and scientific research continues to be morally acceptable. Lehman is in philosophy at the University of Guelph, Ontario.


Lehman, Scott Privatizing Public Lands. New York: Oxford University Press, 1995. 240 pages. $45. The federal government retains roughly a quarter of the U.S. lands, and managing them is often expensive and contentious. A solution, some argue, is privatization. A free market directs privately-owned resources to their most productive uses. Lehman argues that there is no sense of "productivity" for which it is true that greater productivity is both desirable and a likely
consequence of privatizing public lands or "marketing" their management. Lehman is in philosophy at the University of Connecticut.  (v6,#1)

Lehmann, Scott. "Do Wildernesses Have Rights?" Environmental Ethics 3(1981):129-46. Although preservationists sometimes allege a right of wild areas to remain wild, their arguments do not warrant the ascription of such a right. It is hard to see how any argument to this conclusion could be persuasive, for (1) X having a right to Y requires that depriving X of Y injure X (other things being equal), and (2) the only X we have reason to think can be injured is an X which possesses consciousness. On the other hand, rights are problematic creatures, and the individualistic moral view they presuppose does not accord well with the holistic perspective of many preservationists. While it might be possible to develop this perspective into a moral theory that gives wilderness intrinsic value, there seems a greater need for clarifying the policy implications of accepted moral principles. Lehmann is in the department of philosophy, University of Connecticut, Storrs, CT. (EE)


Lei, FM; Qu, YH; Tang, QQ; An, SC, "Priorities for the conservation of avian biodiversity in China based on the distribution patterns of endemic bird genera," Biodiversity and Conservation 12(no.12, 2003):2487-2501. (v.14, #4)

Lei, FM; Qu, YH; Lu, JL; Liu, Y; Yin, ZH, "Conservation on diversity and distribution patterns of endemic birds in China," Biodiversity and Conservation 12(no.2, 2003): 239-254.


Lei Yi, Ecological Ethics, Sanxi People's Press, 2001, Chapters: ethical requirements in the new era; moral extension; radical environmentalism; values and rights of nature; basic principles of ecological ethics; ethics in ecological practice. Professor Lei is at the Humanity School, Tsinghua University.

amount of data now available, and to show them how to use this data for problem solving and management. (v8,#1)


Leiss, William, The Domination of Nature. Montreal: McGill-Queen's University Press, 1994. Paper, $19.95. 1994 reprint of a book first published 23 years ago, in 1972, here unaltered, and something of a classic in the field. The global predicament can only been understood in terms of the most deeply rooted attitude that drives Western civilization: the idea of the domination of nature. Leiss holds the Research Chair in Environmental Policy, School of Policy Studies, Queen's University. (v6,#2)


Lekan, Thomas, "Regionalism and the Politics of Landscape Preservation in the Third Reich," Environmental History. 4(no. 3, July 01 1999):384- . (v10,#4)

Lemaire, Ton Filosofie van het landschap [in Dutch: Philosophy of the landscape], Baarn: Ambo 1970. An influential study into the evolution of the European experience of the landscape as seen in the history of landscape-paintings. Often reprinted in the Netherlands, this book has dominated the field of environmental aesthetics there for 2 decades. Lemaire is an influential philosopher in the Dutch debate regarding the place of man in nature. Formerly at at Nijmegen University, he now lives in the countryside in France.

Lembke, Janet, Looking for Eagles: Reflections of a Classical Naturalist. New York: Lyons and Burford, 1990. $ 19.95. The author spent several decades translating Greek and Latin poetry and now lives with her retired chief-petty-officer husband on the banks of North Carolina's lower Neuse River. There she roams the wilds and wetlands, taking as her chief mentors Aristotle, Pliny the Elder, and other classical natural historians. Ancient eyes observed and variously interpreted the same natural phenomena that offer themselves to our inspection, and asked some of the same questions. (v1,#4)


Lemley, Brad, "The New Ice Age," Discover, September 2002, pp. 35-41. Yes, the Earth is warming, but melting fresh water from ice may shift the Gulf Stream and make Europe much colder, also New England. Studies from the Woods Hole, Massachusetts, oceanographers.
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). (v5,#4)

Lemonick, Michael D., "Sharks under Attack," Time, August 11, 1977, pp. 59-64. We're killing them, 30-100 million a year, and lots of other fish, much faster than they can reproduce. Are they doomed to extinction? Much of the catch is wasted. (v8,#3)

Lemonick, Michael D. "Winged Victory." Time, 11 July 1994, p. 53. One of several accounts of the removal of the bald eagle from the endangered list. The Endangered Species Act of 1973 is up for renewal in Congress, and some conservation groups have argued that the proposed changes in the act would not have saved the bald eagle. (v5,#2)


Lemons, John, "Cooperation and Stability as a Basis for Environmental Ethics." Environmental Ethics 3(1981):219-30. Philosophers and ecologists have proposed that ecological principles such as cooperation and ecosystem stability serve as a basis for environmental ethics. Requisite to understanding whether a cooperation based environmental ethic can be taken as an unqualified good is knowledge of the role of cooperation in the context of other interactions between species (e.g., competition), and the significance of such interactions to ecosystem stability. Further, since the key ecological concept of stability has been ambiguously defined, the various definitions need to be understood so that use of scientific information in philosophical discussion is accurate and consistent. Lemons is at Environmental Studies, New England College, Henniker, NH. (EE)


uncertainty. Contributors give specific guidelines for decision making within existing limitations. (v8,#1)

Lemons, John, "The Need to Integrate Values into Environmental Curricula," Environmental Management 13(no. 2, 1989):133-147. Many environmental problems are controversial because of conflicting values and there is no consensus as to which values should have precedence. Environmental managers must have a full understanding of such values and the principles of ethics that can be used in decision making. Unfortunately, the integration of values into curricula has often not been explicit or comprehensive. University-trained environmental managers do not possess the knowledge, skills, and methods necessary for more ethically based decisions. Specific curricula are analyzed. Environmental programs should more fully include teaching about values and ethics. Lemons is in the Division of Life Sciences, University of New England and is editor of The Environmental Professional. (v2,#1)

Lemons, John, Donald A. Brown, and Gary E. Varner. "Congress, Consistency, and Environmental Law." Environmental Ethics 12(1990):311-27. In passing the National Environmental Policy Act of 1969 (NEPA), Congress committed the nation to an ethical principle of living in "productive and enjoyable harmony" with the natural environment. Thus understood, NEPA can be given either (1) a technology-forcing interpretation or (2) an intelligent decision-making interpretation. We argue that in its subsequent decision to site a high-level nuclear waste repository at Yucca Mountain, Nevada, Congress acted inconsistently with this principle under either interpretation. We conclude that for the foreseeable future, the only way to handle the nation's nuclear wastes consistent with the environmental goal enunciated in NEPA is to leave them in temporary surface storage facilities, prohibit the licensing of any new nuclear power plants, and take all appropriate steps to reduce the nuclear weapons industry. Lemons is at the Dept. of Life Sciences, University of New England, Biddeford, ME. Brown is in the department of Environmental Resources, Harrisburg, PA. Varner is at the Philosophy Dept., Texas A & M, College Station, TX. (EE)

Lemons, John, Donald A. Brown, and Gary Varner, "Congress, Consistency, and Environmental Law: Nuclear Waste at Yucca Mountain, Nevada," Environmental Ethics 12(1990):311-327. Discusses the moral implications of the National Environmental Policy Act of 1969 (NEPA) and shows how Congress acted inconsistently in the selection of Yucca Mountain as a nuclear waste disposal site. The argument assumes that Congress had an ethical principle in mind when NEPA was created. (Katz, Bibl # 2)


Lemons, John. "Shrader-Frechette's Schemata for Scientific Research: Implications for Environmental Professionals." The Environmental Professional 17 (no. 1, 1995):72-. (v6,#1)

metaethical concepts and normative criteria for environmental decisions, but that we have all the facts we need from the environmental sciences. This is contested in the case of our obligation to future generations as affected by current decisions regarding increased fossil fuel use, decisions which affect both the immediate and long-range future, and which must be made deliberately or by default before we know the long-term effects of increased carbon dioxide in the atmosphere. Some suggestions are offered about decision making in the absence of sufficient factual information. Lemons is at the Dept. of Biology and Ecology, Deep Springs College, California. (EE)

Lenkowa (Lenkowa), A., Oskalpowana Ziemia (The Scalped Earth), Wiedza Powszechna Publishers, 1971 (3rd edition); the book (first published in 1961) is supposed to be of equal educational value to Silent Spring by R. Carson. (v.13,#4)

Lenman, James. "Preferences in their Place." Environmental Values 9(2000):431-451. ABSTRACT: In at least some of their forms, Cost-Benefit techniques for the evaluation of environmental projects and policies treat the preferences of citizens as the sole determinants of the value of outcomes. There are two salient ways in which this supposition might be defended. The first is metaethical and appeals to considerations about how we must understand talk of environmental and other values. The second is political and appeals to considerations about democratic legitimacy and the proper aims of public policy. Metaethical considerations, I argue, are something of a red herring here. Roughly subjectivist understandings of our talk of values may be appealingly metaphysically unassuming, but in their most plausible formulations they do not support a view of preferences as the sole determinants of value. Political considerations, on the other hand, are to be taken very seriously. They offer, however, no straightforward rationale for any crudely preferentialist measure of social value. Findings obtained from the use of cost-benefit techniques might sometimes have a legitimate role as an input into, but not as a substitute for, political deliberation. Questions about the scope and limits of such legitimacy are properly addressed in political and not in metaethical terms.
KEYWORDS: Ethics, social philosophy, value, preference, cost-benefit analysis. Lenman is in the Department of Philosophy, University of Glasgow, Glasgow G12 8QQ, UK. (EV)


Leon, Warren, and Brower, Michael, The Consumer's Guide to Effective Environmental Choices: Practical Advice from the Union of Concerned Scientists. Pittsburgh: Three Rivers Press (Carnegie Mellon University), 1999. 304 pages. $15, paper. Forget about paper versus plastic bags, cloth versus disposable diapers, paper cups versus ceramics; none of this makes any serious environmental impact. There are other, much more important things to feel guilty about. Worrying about the trivial things distracts us from the four big culprits: cars, meat, home appliances, and climate control. They have the greatest impact on environmental quality. You are kidding yourself if you drive your Land Rover to the grocery story and worry about buying disposable cups. A study prepared by the Union of Concerned Scientists, among the greenest of U.S. environmental groups. (v.10,#1)

Leonard, Liam, @Environmentalism in Ireland: Ecological Modernisation versus Populist Rural Sentiment. Environmental Values 16(2007): 463-483. The recent phase of economic growth in the Republic of Ireland has led to an increase in industrial and infrastructural development across the island. One offshoot of this accelerated growth has been a rise in community based environmental movements, as environmentalists and concerned communities have come to mobilise campaigns to protect local communities and hinterlands. This paper examines the contestation of two forms of environmentalism, institutional ecomodernism versus a grassroots ecopopulism within the context of the ongoing dispute between a local community in the west of
Ireland and both multinationals and the state, who are attempting to run gas pipelines from the Atlantic Corrib Field through the rural community's lands. Liam is in political science and sociology, Environmental Change Institute and SSRC, Galway, Ireland.


Leopold, Aldo, Sand County Almanac. A Japanese translation is in press. The translator is Keichi Furuya and the publisher is Poporo Publishing Co., Ltd, Attn: Nobuo Hiratsuka, 1-36-2 Honancho Suginamita, Tokoyo, Japan. Phone 03-324-0069. (v1,#2)

Leopold, Aldo, "Means and Ends in Wild Life Management," Environmental Ethics 12(1990):329-332. A previously unpublished lecture of Leopold from May 1936 shows that the "land ethic" had its basis in new directions of wildlife management. Leopold wanted to emphasize the development of "aesthetic" ends because of the failure of instrumental means for duplicating natural process. The essay is followed by "A Brief Commentary" by Eugene Hargrove and J. Baird Callicott, pp. 333-337, which notes that the lecture demonstrates how early Leopold had moved away from prudential arguments for a land ethic. (Katz, Bibl # 2)


Leopold, Aldo, "The Land Ethic," translated by Ye Ping, a philosopher at Northeast Forestry University. Translated into Chinese in a special issue of Information of Ecophilosophy, an occasional publication of the Research Office in Ecophilosophy of the Northeast Forestry University, Harbin, 1989, No. 2. (China)

Leopold, Aldo, For the Health of the Land: Previously Unpublished Essays and Other Writings. Edited by J. Baird Callicott and Eric T. Freyfogle. Washington, DC: Island Press, 1999. Several dozen, mostly short, pieces, excerpts, some never before published, some published in obscure places. Leopold, who died fighting a grasslands fire, left his work only partially in print. Here is Leopold, a prophet recalled from mid-century, with surprising relevance for environmental ethics at the turn of the millennium. (v10,#4)


Leopold, Aldo. "Means and Ends in Wild Life Management." Environmental Ethics 12(1990):329-32. Although research in wildlife management is repeating the history of agriculture, unlike agricultural research, which employs scientific means for economic ends, the ends of wildlife research are judged in terms of aesthetic satisfactions as governed by "good taste." Wild animals and plants are economically valuable only in the sense that human performers and works of art are: the means are of the brain, but the ends are of the heart. Wildlife management has forged ahead of agriculture in recognizing the invisible interdependencies in the biotic community. Moreover, it has admitted its inability to replace natural
equilibria and its unwillingness to do so even if it could. Because many animals do not exhibit their natural behavior under laboratory conditions, researchers are dependent on observation in the wild. The difficulties involved in isolating variables are especially clear in the study of the natural cycle. It is a problem which seems to defy the experimental method.] Leopold (1887-1948). (EE)

Leopold, Aldo. "Some Fundamentals of Conservation in the Southwest." Environmental Ethics 1(1979):131-41. Leopold first discusses the conservation of natural resources in the southwestern United States in economic terms, stressing, in particular, erosion and aridity. He then concludes his analysis with a discussion of the moral issues involved, developing his general position within the context of P.D. Ouspenky's early philosophy of organism. (EE)

Leopold, Luna B., "Ethos, Equity, and the Water Resource," Environment, March 1990, pp.16-20, 37-42. An address given February 15, 1990, the Abel Wolman Distinguished Lecture, sponsored by the Water Science and Technology Board of the U. S. National Academy of Sciences, in Washington. "The proliferation of public agencies dealing with water has led to a dissassociation of their policies, their procedures, and their outlook from the operational health of the hydrologic system." It is deplorable that the government agency most responsible for managing water in water-short regions continues to be so insensitive to the hydrologic continuum and to equity among claimants." "The resource establishment, especially in the field of water, is stuck on the shoals of special interests, a lack of long-term perspective, and a shortage of public-minded leadership." (v1,#3)


Lercher, Aaron. "Is Anyone to Blame for Pollution?" Environmental Ethics 26(2004):403-410. By making use of a distinction between "making something happen" and "allowing it to happen," a polluting act can be defined as making something happen with widely scattered externalized costs. Not all polluting acts are blameworthy, but we can investigate which polluting acts are sufficiently badly performed as to be blameworthy. This definition of polluting act permits us to justify the belief we often have that behavior concerning pollution may be blameworthy, even when we do not know whether the behavior caused harm. (EE)

Lercher, Aaron. "Liberty of Ecological Conscience." Environmental Ethics 28(2006):315-322. Our concern for nonhuman nature can be justified in terms of a human right to liberty of ecological conscience. This right is analogous to the right to religious liberty, and is equally worthy of recognition as that fundamental liberty. The liberty of ecological conscience, like religious liberty, is a negative right against interference. Each ecological conscience supports a claim to protection of the parts of nonhuman nature that are current or potential sites of its active pursuit of natural value. If we acknowledge the fallibility of each conscience in its pursuit of genuine natural value, a policy of indefinitely extensive conservation can be justified. Destruction of an object of current or potential natural value is like destroying a church, mosque, temple, or other holy place. This justification for environmental conservation is analogous to the standard justification for individual negative rights, as upheld by the liberal tradition of Locke, Mill, and Rawls. (EE)

Lercher Aaron, AAre There Any Environmental Rights?@ Environmental Values 16(2007):355-368. This paper extends the argument in H.L.A. Hart's 'Are there any natural rights?' to argue that there is an environmental moral right against pollution. This right is
composed of a right against negligent, reckless or intentional risk imposition, together with the liberty to act in a way that does not negligently, recklessly or intentionally impose risks on others. This right is understood as overrideable or prima facie, and this paper does not claim that this right is the only basis of moral judgment in the cases it considers. The hypothesis that there is a right against pollution does, however, explain some moral reasoning about pollution that otherwise is difficult to explain. Lercher is at Louisiana State University, Baton Rouge, LA.


Leshy, John D., "Challenges to Environmental Law", Environmental Law, 25(No.4, 1995):967-. Leshy is the Solicitor of the United States Department of the Interior. Pointing to current efforts by Congressional Republicans to weaken many existing environmental laws, Leshy emphasizes the urgent need for continued scholarship and public service in the fields of environmental and natural resources law.

Leshy, John D., "Water and Wilderness/Law and Politics," Land and Water Law Review (University of Wyoming, College of Law) 33 (no. 2, 1988):389-417. Excellent article summarizing what is and what is not at stake in the current controversy over water rights that go with wilderness designation. Although opponents of water rights for wilderness have been noisy, in fact existing water rights holders have little at stake, since wilderness water rights "are for the most part rights to in-stream, non-consumptive use, which means that they actually preserve flows for diversion and consumptive use below the federal reservation." Wilderness water rights are also typically junior, since they date from the wilderness designation. Wilderness advocates have achieved signal victories in convincing the nation that significant tracts of federal land ought to be set aside and preserved in their natural condition "as embodying an ethical expression by our culture about itself and its relationship to our natural heritage." Opponents of wilderness water rights can often successfully delay new wilderness designations, since Congress dislikes tampering with the status quo in water law. On the other hand Congress and the federal courts have regularly insisted that designation of federal lands implies reservation of water adequate for the purposes of the designation. Opponents of wilderness water rights may find their strategies successful in short term only to lose credibility in the long term, given how little is really at stake and the considerable popularity of wilderness. "Wilderness is ... the driving engine in federal land management policy just about every place roadless areas exist." Leshy is professor of law, Arizona State University. (v1,#4)

Can, ,16.99. Of all humans so far, roughly 10% are alive with you and me. If human extinction occurred soon, our position in population history would have been fairly ordinary. But if humankind survived at least a few more centuries, perhaps colonizing the galaxy, we could be among the earliest 0.001% of all humans--a point crucial to a "doomsday argument" originated by the cosmologist Brandon Carter. People who accept the argument will re-estimate the threats to humankind. These include asteroid impacts; nuclear, chemical and biological warfare; ozone layer destruction; greenhouse warming, possibly of a runaway kind; overpopulation; poisoning of the environment; new diseases; computers replacing humans entirely; disasters from genetic engineering or from nanotechnology; and perhaps even destruction of the galaxy through a "vacuum metastability upset" initiated by physicists. As well as discussing all this, The End of the World asks why it should worry us. Is anything ever better than anything else, as a genuine fact? Are lives almost never worth living, or do only miserable ones really matter? Could nuclear revenge be appropriate although it did no good? And when people of future generations are mere possibilities, what right have they to be born? Leslie is a well known philosopher and cosmologist at the University of Guelph.

Leslie, John, "The End is More Nigh," Times Higher Education Supplement, February 16, 1966, page 15. "If you view the certainty of global warming, the likelihood of nuclear war and the possibility of grey goo calamity from the perspective of the doomsday argument, nobody should bet on humanity's long-term survival." "I believe that humans may have little more than a half chance of surviving the next 500 years. Inclined at first to say that the risk of Doom within five centuries was only about 5 per cent, I found myself changing this to 40 percent. I reached this conclusion after considering the various dangers facing us in the light of what has come to be known as the 'doomsday argument,' which has made me much less optimistic about the future of humankind."


Leslie, D, Book Review: "Le Heron, R., Murphy, L., Forer, P. and Goldstone, M., editors Explorations in human geography: encountering place," Progress in Human Geography 26(no.3, 2002):421-. (v.13, #3)


Lester, James P., ed., Environmental Politics and Policy: Theories and Evidence (Durham, N. C.: Duke University Press, 1989). Twelve essays on the conservation and environmental movements, public opinion, interest groups, party politics, congress, the federal bureaucracy, the courts as these enter into environmental policy. Also chapters on international environmental politics and alternative views of the environmental problematic. (v1,#3)

protests which marked the 1990s, Eco-Paganism is a collective term for the diverse set of de-traditionalised, but Pagan-like, spiritualities found within road-protest culture. Whilst the actions, and direct-action, of protestors may not always appear outwardly to be religious, many protesters are motivated by their religious convictions such as the paramount belief in the sanctity of nature. The protest lifestyle, involving an immersion in nature through living outdoors and sleeping in treehouses, reinforces these convictions. These sentiments, and the anguish felt by practitioners as they engage in environmental struggle, find expression through spontaneous rituals. This article provides an over-view of the protest lifestyle, suggesting ways in which it informs Eco-Pagan religiosity. An example of a typical ad-hoc religious ritual is provided.


Levidow, Les, "Regulating BT Maize in the United States and Europe: A Scientific-Cultural Comparison," Environment 41(no. 10, Dec 01 1999):10-. Cultural factors play a large role in determining how societies regulate genetically modified crops. (v10,#4)


Levin, SA, "Self Organization and the Emergence of Complexity in Ecological Systems," BioScience 55 (no. 12, December 2005): 1075-1079. What explains the remarkable regularities in distribution and abundance of species, size distributions of organisms, or patterns of nutrient use? How does the biosphere maintain exactly the right conditions necessary for life as we know it? Gaia theory postulates that the biota regulates conditions at levels it needs for survival, but evolutionary biologists reject this explanation because it lacks a mechanistic basis. Similarly, the notion of self organized criticality fails to recognize the importance of the heterogeneity and modularity of ecological systems. Ecosystems are complex adaptive systems, in which pattern emerges from, and feeds back to affect, the actions of adaptive individual agents, and in which cooperation and multicellularity can develop and provide the regulation of local environments, and indeed impose regularity at higher levels.

Levin Simon, Fragile Dominion: Complexity and the Commons. Reading, MA: Helix (Perseus), 1999. 264 pages. $ 27 paper. A tour though the current intellectual landscape of ecology and environmental science. Six fundamental questions (Chapter 3): (1) What patterns exist in nature? (2) What are the relative roles of historical accident versus environmental determinism? Answers: Depends on temporal and spatial scale. (3) How do ecosystems assemble themselves? Often no answers are available, but the answers that are indicate trouble ahead with invasive species. (4) How Does evolution Shape these ecological assemblages? (5) What is the relation between an ecosystem's structure and how it functions? (5) Does evolution favor resilient systems? Answers require a look at self-organized criticality, edge of chaos, fractal landscapes, and more. Other chapters: Chapter 4: Patterns in Nature. Chapter 5: Ecological Assembly. Chapter 9: Where do we go from here? Complexity and the commons. We can hold
on to our best human qualities only through a scientifically-informed stewardship of the biosphere. Levin teaches biology at Princeton University and is a well known ecologist. Reviewed by Robert May, "How the Biosphere is Organized," Science 286(1999):2091. (v10,#4)

Levin, Simon, editor-in-chief, Encyclopedia of Biodiversity. San Diego: Academic Press, 2001. The Encyclopedia of Biodiversity is a comprehensive study of the topic of diversity in the natural world, contained within the covers of a single unified work. It consists of five volumes and includes 313 separate full-length articles by leading international authors, from "Acid Rain and Deposition" through "Zoos and Zoological Parks." Many articles focus on particular taxonomic groups: "Arachnids," "Fungi," "Hymenoptera," "Salmon." Others focus on important biological concepts or areas of study: "Dispersal Biogeography," "The Concept of the Ecosystem," "Mass Extinctions," "Methods of Taxonomy." Still others focus on management issues: "Ex Situ, In Situ Conservation," "Insecticide Resistance," "Logged Forests," "Soil Conservation." In his foreword, E.O. Wilson writes: "The articles in the Encyclopedia of Biodiversity are unusually eclectic, yet organized by a set of easily articulated goals. They are the following: to carry the systematics and biogeography of the world fauna and flora toward completion; map the hotspots where conservation will save the most biodiversity; orient studies of natural history to understand and save threatened species; advance ecosystem studies and biogeography to create the needed principles of community assembly and maintenance; acquire the knowledge of resource use, economics, and polity to advance conservation programs based on sustainability; and enrich the ethic of global conservation in terms persuasive to all."

Many articles should be of interest to environmental ethicists, including the following: (see separate bibliographic listings for each.)

---"Aesthetic Factors," Gordon Orians.
---"Conservation Biology, Discipline Of," Andrew P. Dobson and Jon Paul Rodriguez.
---"Conservation Movement, Historical," Curt Meine.
---"Economic Value of Biodiversity, Overview," Partha Dasgupta.
---"Human Effects on Ecosystems, Overview," Paul Ehrlich and Claire Kremen.
---"Property Rights and Biodiversity," Susan Hanna.
---"Religious Traditions and Biodiversity," Fikret Berkes.
---"Restoration of Biodiversity, Overview," Joy B. Zedler et al.
---"Stewardship, Concept Of," Peter Alpert.
---"Sustainability, Concept and Practice Of," Kai N. Lee.
---"Traditional Conservation Practices," Carl Folke and Johan Colding.

(v.11,#4)

Levin, Simon A., "Complex Adaptive Systems: Exploring the Known, the Unknown and the Unknowable," Bulletin of the American Mathematical Society 40 (no. 1, 2003): 3-19. Complex adaptive systems, such as evolutionary ecosystems, and also human societies, including markets, can sometimes be described with statistical mathematics in the trends, though the detail is unpredictable. In biology, a major problem is the widespread scales, from the molecular to global. Biologists know most about selection operating on individuals, but complex systems transcend individuals. Even with individuals, biologists do not know what mutations will take place. Levin is in ecology and evolution at Princeton University.


Levine, Michael P., "Pantheism, Ethics, and Ecology." *Environmental Values* 3(1994):121-138. Pantheism is a metaphysical and religious position. Broadly defined it is the view that (1) "God is everything and everything is God...the world is either identical with God or in some way a self-expression of his nature" (H.P. Owen). Similarly, it is the view that (2) everything that exists constitutes a 'unity' and this all-inclusive unity is in some sense divine (A. MacIntyre). I begin with an account of what the pantheist's ethical position is formally likely to be. I then discuss the relationship between pantheism and ecology in the context of the search for the metaphysical and ethical foundations for an ecological ethic. It is claimed that it is no accident that pantheism is often looked to for such foundations. KEYWORDS: ecology, environment, ethics, pantheism, Spinoza. Levine is in philosophy at the University of Western Australia. (EV)


Levine, Judith. *Not Buying It: My Year Without Shopping*. New York: Free Press, 2006. A couple that for a year bought only necessities, with much reflecting over what these necessities were.


Levit, George S., Wolfgang E. Krumbein, and Reiner Grübel. "Space and Time in the Works of V. I. Vernadsky." *Environmental Ethics* 22(2000):377-396. The main objective of this paper is to introduce the space-time concept of V. I. Vernadsky and to show the importance of this concept for understanding the biosphere theory of Vernadsky. A central issue is the principle of dissymmetry, which was proposed by Louis Pasteur and further developed by Pierre Curie and Vernadsky. The dissymmetry principle, applied both to the spatial and temporal properties of living matter, makes it possible to demonstrate the unified nature of space and time. At the same time, this principle shows the difference between the spatial-temporal properties of living matter and those of the inert environment. Living matter as opposed to the inert environment is an important part of the Weltanschauung of Vernadsky and is connected with all basic statements of his theoretical system. (EE)

Levitus, S., at al, "Warming of the World Ocean," *Science* 287(2000):2225-2229; Kerr, Richard A., "Globe's 'Missing Warning' Found in the Ocean," *Science* 287(2000):2126-2127. Earth's Missing Warming Found in the Ocean. Greenhouse skeptics have claimed that there is not as much global warming as most models predict, and modelers have long held that this warming is in the oceans, but not had adequate data on ocean warming. A recent study integrates previously scattered data on ocean temperature profiles, and finds the missing warming. Half the warming occurs above 300 meters, but half is below. This also leads to predictions that global warming, though perhaps taking place more slowly than predicted, will be in the high ranges of prediction. (v.11,#1)
Levy, Sanford S. "The Biophilia Hypothesis and Anthropocentric Environmentalism." *Environmental Ethics* 25(2003):227-246. Much anthropocentric environmental argument is limited by a narrow conception of how humans can benefit from nature. E. O. Wilson defends a more robust anthropocentric environmentalism based on a broader understanding of these benefits. At the center of his argument is the biophilia hypothesis according to which humans have an evolutionarily crafted, aesthetic and spiritual affinity for nature. However, the "biophilia hypothesis" covers a variety of claims, some modest and some more extreme. Insofar as we have significant evidence for biophilia, it favors modest versions which do not support a particularly robust anthropocentric environmental ethic. A significantly more robust environmental ethic requires the most extreme version of the biophilia hypothesis, for which there is the least evidence. (EE)


Lewin, R., "Damage to tropical forests, or why were there so many kinds of animals?" *Science* 234(1986):149-150.


Lewis, Dale, Gilson B. Kaweche, and Ackim Mwenya, "Wildlife Conservation Outside Protected Areas--Lessons from an Experiment in Zambia," *Conservation Biology* 4(1990):171-180. An experiment project that sought to halt the drastic loss of elephants and rhinos to poaching in and around protected areas in the Luangwa Valley. The project involved local residents outside national parks in wildlife protection and management activities, sustained yield uses of wildlife, and recycling revenue into community development. The authors are in wildlife conservation in Zambia. (Africa)

Lewis, Dale M., Alpert, Peter. "Trophy Hunting and Wildlife Conservation in Zambia," *Conservation Biology* 11(no.1, 1997):59. Trophy hunting is generating significant benefits for residents of game management areas in Zambia, and how these benefits might be enhanced. With attention to CAMPFIRE. (v8,#2)


Lewis, Martin W., Green Delusions: An Environmentalist Critique of Radical Environmentalism. Durham, NC: Duke University Press, 1992. 288 pages, cloth. "Eco-radicalism tells us that we must dismantle our technological and economic system, and ultimately our entire civilization. Once we do so, the rifts between humanity and nature will purportedly heal automatically. I disagree. What I believe we must do is disengage humanity from nature by cleaving to, but carefully guiding, the path of technological progress. It is for the environmental community to decide which alternative offers the best hope for ecological salvation" (p. 251, concluding paragraph). Many of the most devoted and strident "greens," those who propose a radical environmentalism, unwittingly espouse an ill-conceived doctrine that has devastating implications for the global ecosystem. Lewis distinguishes the main variants of eco-extremism, exposes the fallacies upon which such views ultimately flounder, and demonstrates that the policies advocated by their proponents would, if enacted, result in unequivocal ecological catastrophe. The agenda proposed by eco-extremists, based on local economic self-sufficiency, a shunning of market exchange, and a general retreat from advanced technology would require a thoroughgoing reinvention of all social and economic forms. That has the potential for monumental disruption and complete political alienation, an undermining of the very foundations on which a new and ecologically sane economic order must be built. Lewis advocates moving forward into the solar age, an age that will require more investment in our technological infrastructure and well as the retention of a globally integrated economy. Lewis, once himself a radical environmentalist (p. 80), now advocates what he calls a "Promethean environmentalism" (p. 16, p. 250, etc.). In order to advance the reforms needed to change our present course, environmentalism must avoid divisive radical philosophies and try to create a broad-ranging consensus. Lewis is Assistant Professor of Geography at George Washington University.

Lewis, Michael, ed. American Wilderness: A New History. Oxford: Oxford University Press, 2007. In this anthology, fourteen historians provide a nuanced look at how and where wilderness has been protected and preserved by Americans in the past and today. Beginning with indigenous peoples and the first contact between Europeans and the New World and ending with the debates over the Alaskan wilderness at the end of the twentieth century, this anthology focuses on events, people, and themes in the history of the United States and its wild landscapes.


Li Peichao, Reconciliation of Nature and Humanism: The New Perspective of Ecological Ethics, Hunan People's Publishing House, 2001. chapters: the history of ecological ethics; the social and theoretical condition of extending the perspective of ecological ethics; the new characteristics of ecological ethics; the relevance of Chinese traditional culture with ecological ethics; ecological ethics and China's modernization. Professor Li is at the Institute of Ethics, Hunan Normal University.

Li Peichao, "Defending the legitimacy of environmental ethics", Ethic and Civilization, 2001(3).


Li Chongzhen, Hu Shuiqing, "Three errors of ecological ethics studies", Journal of Hunan Uni. 2003(1)

Li, W., Z. Wang, and Tang, H. Designing the Core Zone in a Biosphere Reserve Based on Suitable Habitats: Yancheng Biosphere Reserve and the Red Crowned Crane (Grus japonensis). Biological Conservation 90(No. 3, 1999):167- . (v10,#4)


Li Yalin, "The logical prerequisite of environmental ethics", Journal of Sichuan Uni. 2002(1)

Li Yalin, "The philosophical foundation of environmental ethics", Journal of Sichuan Uni. 2003(1)

Liao Xiaoping, "Eco-ethic, intergenerational ethic and sustainable development", Ethic and Civilization, 2002(3)

Librova, Hana. "The Disparate Roots of Voluntary Modesty." Environmental Values 8(1999):369-380. ABSTRACT: The effective solution of environmental problems calls for changes in levels of consumption. Sociologists have described moderation in households of high socio-economic status in affluent countries, and also a type of modesty which cannot be a response to the experience of abundance. However, its essence is not the way of life of a traditional community. Sustainable living based on self-restraint could be considered to be a symptom of the summit of cultural evolution to date. Nevertheless, historical experience warns us against making too much of contemporary cases of moderation. KEYWORDS: voluntary modesty, international sociological comparison. Hana Librova, Department of Environmental Studies Masaryk University Gorkeho 7, 602 00 Brno, Czech Republic (EV)


Lieben, Ivan J. "Political Influences on USFWS Listing Decisions Under the ESA: Time to Rethink Priorities," Environmental Law 27(no.4, 1997):1323-. How political and economic pressures have modified USFWS listing decisions under the ESA, in direct contradiction to the statute’s plain language. Lieben recommends modifications to USFWS listing regulations, which would reduce the likelihood of the Service considering political factors in future decisions and place more emphasis on the ecosystem significance of a candidate species. (v9,#2)


Lienhoop, Nele and Douglas C. MacMillan, “Contingent Valuation: Comparing Participant Performance in Group-Based Approaches and Personal Interviews,” *Environmental Values* 16(2007): 209-232. This paper reports a Contingent Valuation application to estimate the non-market costs and benefits of hydro scheme developments in an Icelandic wilderness area. A deliberative group-based approach, called Market Stall, is compared to a control group consisting of conventional in-person interviews, in order to investigate flaws of Contingent Valuation, such as poor validity and protest responses. Perceived property rights suggested the use of willingness-to-accept in compensation for wilderness loss and willingness-to-pay for hydro scheme benefits. The study is novel as it applies participant behaviour observation to gain insights into the shortcomings of conventional data collection modes. Main drawbacks with in-person interviews were found to be low motivation, standardised information and time pressure which hindered individuals from carefully considering their preferences. Market Stall performed better in the study: welfare estimates were more easily explained by socio-economic variables, the non-response rate was lower, and respondents were more engaged. Our research findings also suggest that participant behaviour can be used to supplement conventional validity tests. Lienhoop is at the Helnholtz Centre for Environmental Research, Leipzig, Germany. MacMillan is in anthropology, University of Kent, Canterbury, UK.

Light, Andrew, "Are all Anthropocentrists Against Nature?" *Rethinking Marxism*, 11 (No. 4, 1999): 93-102. Consideration and critique of Steven Vogel's *Against Nature* (SUNY, 1998). Argues that Vogel's description of the environmental implications of the work of the Frankfurt School is excellent but may be criticized for its treatment of broader forms of anthropocentrism and for overlooking the implications of the agents/patients distinction when considering the possibility of representing the welfare of nonhumans. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.


Light, Andrew, "Contemporary Environmental Ethics: From Metaethics to Public Philosophy," *Metaphilosophy* 33(no. 4, 2002):426-449. In the past thirty years environmental ethics has emerged as one of the most vibrant and exciting areas of applied philosophy. Several journals and hundreds of books testify to its growing importance inside and outside philosophical circles. But with all this scholarly output, it is arguably the case that environmental ethics is not living up to its promise of providing a philosophical contribution to the resolution of environmental problems. This article surveys the current state of the field and offers an alternative path for the future development of environmental ethics toward a more publicly engaged model of applied philosophy. Light is in the Applied Philosophy Group, New York University.


Light, Andrew, ed., *Social Ecology after Bookchin*. New York: The Guilford Press, 1998. 401 pages. $ 20.00 paper. For close to four decades, Murray Bookchin's ecoanarchist theory of social ecology, one of the most controversial in the field, has challenged philosophers and activists working to link environmental concerns with the desire for a free and egalitarian society. Eleven contributors believe that Bookchin needs his critics and contemplate what next. Reassessing ecological ethics, combining social ecology and feminism, building decentralized communities, evaluating new technology, relating theory to activism, and improving social
ecology through interactions with other left traditions. Light is in philosophy at State University of New York, Binghamton. (v.10,#2)

Light, Andrew, "Environmental Pragmatism as Philosophy or Metaphilosophy: On the Weston-Katz Debate," in Environmental Pragmatism, ed. A. Light and E. Katz (London: Routledge Press, 1996), pp. 325-338. Looks at the debate Environmental Ethics between Anthony Weston and Eric Katz (vols. 7:4, 9:3, and 10:3) on the issue of environmental pragmatism. Argues that given a distinction between two different pragmatist approaches to environmental ethics, both Katz and Weston are pragmatists. Compares the views of both scholars to that of J. Baird Callicott who is deemed not a pragmatist in either sense. (v7,#1)


Light, Andrew and Jonathan M. Smith, eds. Philosophy and Geography III: Philosophies of Place. Lanham, Maryland: Rowman and Littlefield, 1998. 309 pp. Contents include:
- Malpas, Jeff, "Finding Place: Spatiality, Locality, and Subjectivity."
- Dickinson, James, "In Its Place: Site and Meaning in Richard Serra's Public Sculpture."
- Mandoki, Katya, "Sites of Symbolic Density: A Relativistic Approach to Experienced Space."
- Schnell, Izhak, "Transformations in the Myth of the Inner Valleys as a Zionist Place."
- Norton, Bryan, and Hannon, Bruce, "Democracy and Sense of Place Values in Environmental Policy."
- Howard, Ian, "From the Inside Out: The Farm as Place."
- Glidden, David, "Commonplaces."
- Wasserman, David, Womersley, Mick, and Gottlieb, Sara, "Can a Sense of Place Be reserved?"
- Caragata, Lea, "New Meanings of Place: The Place of the Poor and the Loss of Place as a Center of Mediation."
- Brey, Philip, "Space-Shaping Technologies and the Geographical Disembedding of Place."

Light, Andrew and Jonathan M. Smith, eds. Philosophy and Geography III: Philosophies of Place. Lanham, MD: Rowman and Littlefield Publisher, 1999. $68.00. The significance of place shifts and, some think, diminishes. But a growing literature testifies to the persistence of place as an incorrigible aspect of human experience, identity, and morality. Contents:
- Smith, Jonathan M., Light, Andrew, and Roberts, David, "Introduction: Philosophies and Geographies of Place."
- Malpas, Jeff, "Finding Place: Spatiality, Locality, and Subjectivity."
- Dickinson, James, "In Its Place: Site and Meaning in Richard Serra's Public Sculpture."
- Mandoki, Katya, "Sites of Symbolic Density: A Relativistic Approach to Experienced Space."

Light, Andrew, and Katz, Eric, eds. Environmental Pragmatism. New York: Routledge, 1996. 352 pp. Notes. Index. $65.00 cloth; $19.95 paper. By applying classical American pragmatist thought to the environment, this anthology defines and develops the pragmatic approach (methodology or strategy). The approach is more a method of inquiry and problem-solving than a position (or theory). Generally, the search for a single comprehensive theory is rejected in favor of conceptual pluralism, on the grounds that commitment to a theory can (and often) hinders problem-solving and policy formulation, adoption, and implementation. The volume is likely to become the classic statement of the pragmatist environmental approach. Contributors include such important pragmatists as Bryan Norton, Anthony Weston, and Larry Hickman (the Director of the Dewey Center at Southern Illinois University). Light is in the Department of Philosophy at the University of Montana. Katz is in Philosophy at New Jersey Institute of Technology.

Contributions to the volume are:
--Parker, Kelly A. "Pragmatism and Environmental Thought." Pages 21-37.
Light, Andrew, "Deep Socialism?: An Interview with Arne Naess," CNS: Journal of Socialist Ecology, Vol. 8, No. 1, March 1997, pp. 69-85. Focuses on the social ecology-deep ecology debate, the deep ecology-ecofeminism debate, Naess's views on the relationship between theory and practice (which suggest they are largely pragmatic) and whether Naess likes the slavish devotion of some of his followers. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.

Light, Andrew, "Is Wilderness a Natural Kind?" Society for Philosophy and Geography Newsletter 1 (no. 1, Dec. 1994): 2-3. "Wilderness" is a term whose reference is historically dependent on the social context in which it is used and may be too culturally loaded to represent anything of foundational moral significance." Light amply wishes to conserve the areas we call wilderness, but is uncertain about the term. Light is a philosopher at the University of Alberta. A brief rejoinder follows, "Varieties of Wilderness: A Rejoinder," by Jonathan M. Smith (p. 4).

Light, Andrew, "Elegy for a Garden: Thoughts on an Urban Environmental Ethic," Philosophical Writings 14 (2000): 41-47. Narrative piece about the importance of working out an environmental ethic for urban environments illustrated by a description of the fight in New York City over preservation of community gardens. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.


Light, Andrew, "Symposium: Eric Katz's Nature as Subject" Ethics and the Environment 7(no. 1, 2002):102-146. Includes:
-Ouderkirk, Wayne, "Katz's problematic dualism and its 'seismic' effects on his theory," pp. 124-137
-Katz, Eric, "Understanding moral limits in the duality of artifacts and nature: A reply to critics," pp. 138-146. (E&E)


Light, Andrew, Higgs, Eric S., "The Politics of Ecological Restoration," Environmental Ethics 18(1996):227-247. Discussion of ecological restoration in environmental ethics has tended to center on issues about the nature and character of the values that may or may not be produced by restored landscapes. In this paper we shift the philosophical discussion to another set of issues: the social and political context in which restorations are performed. We offer first an evaluation of the political issues in the practice of restoration in general and second an assessment of the political context into which restoration is moving. The former focuses on the inherent participatory capacity at the heart of restoration; the latter is concerned with the commodified use (primarily in the United States) and nationalized use (primarily in Canada) to which restoration is being put. By means of a comparative examination of these two areas of inquiry, we provide a foundation for a critical assessment of the politics of restoration based on the politics in restoration. Light is in philosophy at the University of Montana. Higgs is in anthropology and sociology at the University of Alberta. (EE)

Light, Andrew, "What is an Ecological Identity?," Environmental Politics 9 (No. 4, 2000): 59-81. Is environmentalism a form of identity politics like feminism, race based politics, and other political orientations at the core of the new social movements? This paper argues that it can be, but that this claim to political identity has only been clearly available so far to a narrow set of environmentalists, most notably deep ecologists and essentialist ecofeminists. But if it is plausible that broader forms of environmentalism can represent a political identity, then a set of political objections to the content of environmentalism become much more salient than they might
at first appear. After attempting a thorough assessment of the possible interpretations of an environmental identity politics, I look at the political problems that follow. If environmentalists decide to articulate their environmentalism as a kind of 'ecological identity', and it is surely an open question as to whether they should, then this identity will encounter some serious hurdles that deserve attention. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

Light, Andrew and Alan Rudy, "Social Ecology and Social Labor: A Consideration and Critique of Murray Bookchin," Capitalism, Nature, Socialism, June 1995, pp 75-106. The first comprehensive critique of social ecology from an ecological socialist perspective. The first part of the paper summarizes the basic social and political ground of Bookchin's theories; the second part argues that the absence of the category of social labor ultimately undermines the transformative potential of social ecology. (v7,#1)


The first comprehensive presentation of environmental pragmatism as a new approach. Environmental pragmatism argues that theoretical debates are hindering the ability of the environmental movement to forge agreement on basic policy imperatives. This new direction advocate a serious (though not theoretical) inquiry into the practical merits of moral pluralism, using the methodology of classical American pragmatist thought. (v7,#1)

Light, Andrew, "Urban Wilderness," Wild Ideas, ed. David Rothenberg (Minneapolis: University of Minnesota Press, 1995), pp. 195-211. Short version reprinted as "Whither Classical Wilderness?", in The Trumpeter, March 1995. Distinguishes between two historical conceptions of the idea of wilderness—classical and romantic—and argues that the idea of the classical wilderness has been transferred to descriptions of urban spaces. Discusses the notions of wilderness of the Puritans, Upton Sinclair, and Mike Davis (writing about Los Angeles). (v7,#1)

concerning the use of the metaphor of wilderness to describe inner cities (see Light's "Urban Wilderness," in Wild Ideas, ed. David Rothenberg, University of Minnesota Press, 1995) by tracking the malicious representation of the city as an urban wilderness in recent American cinema. The article closes with a look at the more hopeful appeals to an urban wilderness in portrayals of the inner city by African-American film makers like John Singleton and the Hughs brothers. The point of this analysis is to serve a normative critique of the description of racial minorities as the inhabitants of an urban wilderness; a continuation of the legacy of the depiction of racial others and nature itself as uncivilized and thus unworthy of equal moral consideration.


Light, Andrew, and Jonathan M. Smith, eds. Philosophy and Geography I: Space, Place, and Environmental Ethics. Lanham, MD: Rowman & Littlefield Publishers, 1997. 283pp. $22.95 paper, $57.50 cloth. The first of an annual volume. Light is in philosophy at the University of Montana and Smith in geography, Texas A&M University. The intersections of philosophy and geography on the issue of environmental ethics, environmental law, natural value, and conceptions of nature. Contents:

--Light, Andrew and Jonathan M. Smith, "Introduction: Geography, Philosophy, and the Environment" (pp. 1-13)
--Burch, Robert, "On the Ethical Determination of Geography: A Kantian Prolegomenon" (pp. 15-47)
--Katz, Eric, "Nature's Presence: Reflections on Healing and Domination" (pp. 49-61)
--Trachenberg, Zev, "The Takings Clause and the Meaning of Land" (pp. 63-90) --Westcoat, Jr., James L., "Muslim Contributions to Geography and Environmental Ethics" (pp. 91-116)
--Clark, John, "The Dialectical Social Geography of Elisée Reclus" (pp. 117-142)
--Spash, Clive L. and Adam M. Clayton "The Maintenance of Natural Capital: Motivations and Methods" (pp. 143-173)
--Paden, Roger, "Wilderness Management" (pp. 175-187)
--Steelwater, Eliza, "Mead and Heidegger: The Ethics and Theory of Space, Place, & Environment" (pp. 189-207)
--King, Roger, "Critical Reflections on Biocentric Environmental Ethics" (pp. 209-230).
--Gandy, Matthew, "Ecology, Modernity, and the Intellectual Legacy of the Frankfurt School" (pp. 321-254)
--Booth, Annie L., "Critical Questions in Environmental Philosophy" (pp. 255-273). Forthcoming volumes in this series are: II. Public Space (October 1997); III. The Meaning of Place (submissions solicited); IV: Aesthetics of Everyday Life (submissions solicited). (v8,#1)

Light, Andrew and Ben Shippen, Jr., "Is Environmental Quality a Public Good?" Working Paper, Eco-Research Chair, Environmental Risk Management, University of Alberta, Edmonton, Alberta, Canada. Environmental protection, like police protection, is something which we want to be provided equally as a public good. The legal standards should not be lower in one place than another. But solutions to environmental pollution based on economic incentives that trade pollution rights do not have equal results and allow different regions of the country to be treated unequally. This is like allowing, as a matter of policy, more crimes in one part of a city as long as few are committed in another part. Light is in philosophy at the University of Alberta, Shippen in economics at Florida State University. (v6,#4)


Light, Andrew, "Contemporary Environmental Ethics: From Metaethics to Public Philosophy," Metaphilosophy 33 (No. 3, 2002). In the past 30 years environmental ethics has emerged as one of the most vibrant and exciting areas of applied philosophy. Several journals and hundreds of books testify to its growing importance inside and outside philosophical circles. But with all of this scholarly output, it is arguably the case that environmental ethics is not living up to its promise of providing a philosophical contribution to the resolution of environmental problems. This article surveys the current state of the field and offers an alternative path for its future development toward a more publicly engaged model of applied philosophy. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.


Light, Andrew and Shippen, Ben S. Jr., "Should Environmental Quality be a Publicly Provided Good?", Organization and Environment, 16, (No. 2, 2003): 232-42. Light is an assistant professor of environmental philosophy and the director of the Environmental Conservation Education Program at New York University. Ben S. Shippen Jr. was an assistant professor of economics at Mercer University, Macon, Georgia before becoming a research economist at ERS Group.

Light, Andrew, "Restoring Ecological Citizenship," in Democracy and the Claims of Nature, ed. B. Minteer and B. P. Taylor (Lanham, MD: Rowman & Littlefield, 2002). Argues that if we take seriously the value of public participation in restoration then we need to understand participation as democratic participation. Claims that this notion of democratic participation is best understood as a form of environmental citizenship (along a republican model of citizenship). Argues against an identity model of participation and uses the debate in restoration over prairie burning to illustrate the difference between the citizenship and identity models. Concludes with a brief account of how these claims could be put into a legal and policy framework. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.


Introduction offers a critique of Callicott's claims about environmental philosophy itself being the most radical version of environmental activism. Contents:

- "Environmental Ethics - Whose Philosophy? Which Practice?", Andrew Light and Avner de-Shalit;
- "Political Theory and the Environment: Nurturing a Sustainable Relationship," Michael Freeden
- "Intuition, Reason, and Environmental Argument," Mathew Humphrey,
"The Justice of Environmental Justice: Reconciling Equity, Recognition, and Participation in a Political Movement," David Schlosberg,

"Constitutional Environmental Rights: A Case for Political Analysis," Tim Hayward,

"Trusteeship: A Practical Option for Realizing our Obligations To Future Generations?," William Griffith,

"Ecological Utilisation Space: Operationalizing Sustainability," Finn Arler,

"The Environmental Ethics Case for Crop Biotechnology: Putting Science Back into Environmental Practice," Paul B. Thompson,

"Yew Trees, Butterflies, Rotting Boots and Washing Lines: The Importance of Narrative," Alan Holland and John O'Neill,

"The Role of Cases in Moral Reasoning: What Environmental Ethics Can Learn from Biomedical Ethics," Robert Hood,

"Grab Bag Ethics and Policymaking for Leaded Gasoline: A Pragmatist's View," Vivian E. Thomson,

"Animals, Power and Ethics: The Case of Fox Hunting," Clare Palmer and Francis O'Gorman,

"Ethics, Politics, Biodiversity: A View From the South," Niraja Gopal Jayal.

Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.

Shalit is in Political Science, Hebrew University of Jerusalem.

Light, Andrew, "The Role of Technology in Environmental Questions: Martin Buber and Deep Ecology as Answers to Technological Consciousness," Research in Philosophy and Technology, Vol. 12, 1992, pp. 83-104. When viewed as responses to the imposition of forms of technological domination over nature, the views of the deep ecologists (especially Naess) are remarkably similar to the onto-theology of Martin Buber. Suggests that ultimately Buber's approach to topic is even more radical than Naess's. (v7,#1)


Light, Andrew, "Restauración Ecológica y Reproducción del Arte," in Ingenieria Genetica Y Ambiental: Problemas filosoficos y sociales de la biotecnologia, ed. T. Kwiatkowska and R. L. Wilchis (Mexico City: Plaza y Valdez, 2000), pp. 209-219. ("Ecological Restoration and Art Reproduction") Robert Elliot's "Faking Nature," represents one of the strongest philosophical rejections of the ground of restoration ecology ever offered. Here, and in a succession of papers defending the original essay, Elliot argued that ecological restoration was akin to art forgery. Just as a copied art work could not reproduce the value of the original, restored nature could not reproduce the value of nature. I reject Elliot's art forgery analogy, and argue that his paper provides grounds for distinguishing between two forms of restoration that must be given separate normative consideration: (1) malicious restorations, those undertaken as a means of justifying harm to nature, and (2) benevolent restorations, or, those which are akin to art restorations and which cannot serve as justifications for the conditions which would warrant their engagement. This argument will require an investigation of Mark Sagoff's arguments concerning the normative status of art restorations. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

A strategy for resolving competing claims within environmental political theory, focusing on debates between two kinds of theorists: ontologists--such as deep ecologists--and materialists--such as Murray Bookchin and the social ecologists. The urgency of the ecological crisis requires a form of metatheoretical compatibilism between the opposing theories. The argument is derived from a selective and critical reading of Rorty's neo-pragmatism concerning the distinction between public and private practice. (v7,#1)

Light, Andrew, "Hegemony and Democracy: How the Inherent Politics in Restoration Informs the Politics of Restoration," Restoration and Management Notes 12 (No. 2, Winter 1995):140-144. Argues that ecological restoration contains an inherent political dimension which consists in the potential it always has to serve as the ground for public participation in the human-nature community. (v7,#1)


Light, Andrew, "Contemporary Environmental Ethics: From Metaethics to Public Philosophy," Metaphilosophy, 33 (No. 4, July 2002), pp. 426-449. In the past 30 years environmental ethics has emerged as one of the most vibrant and exciting areas of applied philosophy. Several journals and hundreds of books testify to its growing importance inside and outside philosophical circles. But with all of this scholarly output, it is arguably the case that environmental ethics is not living up to its promise of providing a philosophical contribution to the resolution of environmental problems. This article surveys the current state of the field and offers an alternative path for its future development toward a more publicly engaged model of applied philosophy. The article includes a substantial section criticizing previous attempts to link environmental ethics and environmental policy, especially the work by nonanthropocentrists on the problem of preservation of the Brazilian rainforest. (v.13, #3)


pages. Philosophical disagreements on environmental questions can sometimes be set aside in order to achieve compatible strategies to work toward improving environmental conditions. As part of this strategy, pragmatists call for abandoning the existing prejudices of environmental philosophy, in particular nonanthropocentrism and commitments to moral monism. The social ecology-deep ecology divide in political ecology, and the debate between monists and pluralists in environmental ethics. Both debates are used to advance the pragmatist position. The privatization of environmental regulations, and restoration ecology. Questions concerning urban space and political identity. Technology and built space have traditionally been ignored by environmental philosophers. Space and place are integral to an environmental philosophy tempered by pragmatic concerns. The advisor was Bernd Magnus. (v.10,#1)

Light, Andrew, "Taking Environmental Ethics Public," in Environmental Ethics: What Really Matters? What Really Works?, ed. D. Schmidtz and E. Willott (Oxford: Oxford University Press, 2001), pp. 556-566. The pragmatist critique of environmental ethics has argued that the field has largely failed in offering a set of moral foundations to improving environmental policies or for motivating agents to embrace more supportive environmental practices. If this critique is taken seriously then a reassessment is needed of how to encompasses both a traditional philosophical task involving an investigation into the value of nature, and a second public task involving the articulation of arguments which will be morally motivating concerning environmental protection. This chapter overviews the case for a demarcation of these tasks and makes a claim about their relative importance in relation to each other in the context of a methodological form of environmental pragmatism (as opposed to a more purely philosophical application of the work of particular pragmatists to environmental questions). The result is a form of environmental pragmatism that a nonpragmatist could embrace in environmental ethics. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

Light, Andrew, "Environmental Ethics and Environmental Risk: Expanding the Scope of Ecosystem Health," Ecosystem Health, Vol. 4, No. 3, September 1998, pp. 147-151 (double pages). Introduction to a symposium on environmental ethics and environmental risk assessment. Argues that the ethical implications of risk management are to be best understood within the context of ecosystem health. Especially important in order to cease thinking about environmental risk assessment and management solely in terms of human health issues and instead broaden its scope to cover human health in relation to the environment. Includes a discussion of an exchange in the same journal between Bryan Norton, Baird Callicott and Kristin Shrader-Frechette on the role of pragmatism in understanding ecosystem health. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.

Light, Andrew, "Borgmann's Unzeitgemässe Betrachtungen: On the Pre-Political Conditions of Politics of Place," in Technology and the Good Life?, ed., E. Higgs, A. Light, and D. Strong (Chicago: University of Chicago Press, 2000), pp. 106-125. Offers a defense against the claim that Albert Borgmann's work in philosophy of technology is politically conservative. Argues that Borgmann's work is culturally conservative and does not contain an explicit or formal political philosophy. Instead, Borgmann's work is best understood politically as offering pre-political conditions for how we should understand the normative value of places. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#2)

Light, Andrew, "Place Authenticity as Ontology or Psychological State?" Philosophy and Geography, 5 (No. 2, 2002), pp. 204-210. This article responds to Eric Katz's "The Authenticity of Place in Culture and Nature: Thoughts on the Holocaust in the Spanish Synagogue of Venice," in the same issue of the journal. Light argues that Katz's attempt to extend his work on authenticity in ecological restoration to the cultural experience of place confuses a psychological with a metaphysical account of authenticity. The piece concludes with an appeal for an aesthetic understanding of the importance of place in environmental philosophy. (v.13, #3)
Light, Andrew, "On the Irreplaceability of Place," *Worldviews: Environment, Culture, Religion* 2(1998):179-184. Analysis of a puzzle concerning Christoph Rehmann-Sutter and the irreplaceability of place. If places are designated as valuable in part because they are irreplaceable, and if any human can appreciate any place, then how can humans ever be part of a place if they are ultimately substitutable as agents who appreciate places? Two possible answers: Two kinds of bioregionalism, liberal bioregionalism and communitarian bioregionalism are identified. Liberal bioregionalism, recommended for the present, avoids the irreplaceability problem by jettisoning the need to focus on the special qualities of a particular place. Communitarian bioregionalism might be a goal down the road. Light is in philosophy and environmental studies, Binghamton University, SUNY. (v.10,#2)

Light, Andrew, "Moral Progress Amid Technological Change," *Journal of Speculative Philosophy* 15 (No. 3, 2001): 195-201. Response to John Lachs's "Both Better Off and Better," in same issue which argues that increasing affluence has led to moral progress. Light claims that Lachs errs in not considering the combined environmental consequences and consequences to future generations of increases in individual welfare. Examples discussed include trade-offs between advantages of owning cars and contributions to greenhouse gases and sustainable agriculture. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

Light, Andrew, "Restoration, the Value of Participation, and the Risks of Professionalization," in *Restoring Nature: Perspectives from the Social Sciences and Humanities*, ed. P. Gobster and B. Hull (Washington, D.C.: Island Press, 2000), pp. 163-181. Efforts to professionalize restoration include the regulation of restoration projects, the certification of restoration volunteers, and the creation and accreditation of restoration degree programs. By increasing the expertise and authority of restorationists, professionalization offers a potential mechanism to reduce the conflict that seems inherent in many restoration projects. However, professionalization may have significant costs. Professionalism will likely close the content of the language of restoration by controlling how concepts, terms, and practices of restoration are defined and delimited. This control may make restoration less participatory and degrade the unique democratic potential of restoration projects. I address these issues using as an example the conflict created by the numerous restorations known collectively as the Chicago Wilderness project. The first section expands on and supercedes the discussion of the democratic values implicit in acts of restoration discussed in Light's 1996 article with Eric Higgs, "The Politics of Ecological Restoration," in *Environmental Ethics*. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#2)

Light, Andrew. "Ecological Restoration and the Culture of Nature: A Pragmatic Perspective," in *Restoring Nature: Perspectives from the Social Sciences and Humanities*, ed. P. Gobster and B. Hull (Washington, D.C.: Island Press, 2000), pp. 49-70. Most environmental philosophers have failed to understand the theoretical and practical importance of ecological restoration. This failure is primarily due to the mistaken impression that ecological restoration is only an attempt to restore nature itself, rather than an effort to restore an important part of the human relationship with non-human nature. I first discuss the possibility of transforming environmental philosophy into a more pragmatic discipline, better suited to contributing to the formation of sound environmental policies, including ecological restoration. In particular, I advocate an alternative philosophical approach to the kind of work on the value of ecological restoration raised by Eric Katz and other philosophers who claim that restored nature can never reproduce the actual value of nature. Here, I will make this contrast more explicit and go on to further argue that Katz's views in particular are not sufficiently sensitive to the values at work in the variety of projects falling within the category of ecological restoration. A richer description of the ethical implications of restoration will identify a large part of its value in the revitalization of the human culture of nature. Short versions reprinted as "Restoration or Domination?: A Reply to Katz," in *Environmental Restoration: Ethics, Theory, and Practice*, ed. William Throop (Amherst, NY: Humanity Books (Prometheus), 2000),
Light, Andrew, "The Urban Blind Spot in Environmental Ethics," Environmental Politics 10 (No. 1, 2001): 7-35. In the past 30 years environmental ethics and political ecology have emerged as two of the most vibrant and exciting areas of applied philosophy. Several journals and hundreds of books testify to their growing importance inside and outside philosophical circles. But surprisingly very little has ever been said, in particular, by environmental ethicists about cities, and what has been written is largely negative. This paper offers an explanation for why the urban environment has been ignored in environmental ethics (with a focus on examples found in Holmes Rolston's work), second, provides a series of ecological and social arguments for why urban issues cannot be overlooked in a complete environmental ethic, and finally, offers an example of the sorts of issues that an expanded environmental ethic, inclusive of urban environments, would need to focus on. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#2)

Light, Andrew, "Public Goods, Future Generations, and Environmental Quality," in Not for Sale: In Defense of Public Goods, ed. A. Anton, M. Fisk, and N. Holmstrom (San Francisco: Westview Press, 2000), pp. 209-226. Environmental quality ought to be preserved as an inviolate publicly provided good. After analyzing the relationship between publicly provided goods (such as fire or police protection) and "pure public goods," I argue that the requirements for the delivery of publicly provided goods are parasitic on the definition of pure public goods, creating a normative burden on those who would advocate the privatization of their delivery or maintenance. Using this claim it is argued that a publicly provided good cannot be privatized if it would result in inequality in the distribution of the good, or diminish the quality of the good. Identification of this argumentative burden on privatization efforts is strengthened by a claim that publicly provided goods represent a community’s articulation of a suggestion that such goods fulfill commonly held needs. I argue that environmental quality is just such a good. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

Light, Andrew and Roberts, David, "Toward New Foundations in Philosophy of Technology: Mitcham and Wittgenstein on Descriptions," Research in Philosophy and Technology 19 (2000): 125-147. Over the last twenty-five years, philosophy of technology has become a recognizable sub-discipline in the Americas and Europe. There are journals, societies, and international meetings devoted to the subject. But the field suffers from the lack of a common ground on which to base questions that might define it as a philosophical discipline, central questions whose resolution will drive the discipline forward. Certainly there are many views now on the social effects of technology and how we are to evaluate those effects, but the field nonetheless lacks a critical intradisciplinary discussion of those competing views of the kind that characterizes most philosophical sub-fields such as environmental ethics. After reviewing the general state of the field, we turn to an analysis of the work of Carl Mitcham, one philosopher of technology who has focused on a more descriptive approach to identifying the subject of his philosophical endeavors. We then sketch an alternative descriptive approach to Mitcham’s grounded in Wittgenstein’s descriptive strategies, in part to articulate our own account of improving the descriptive base of the field and in part to show how one form of descriptivism (ours) can critically interact with another (Mitcham's). Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. Roberts completed an M.A. in philosophy at the University of Montana. (v.13,#1)

the later debate, in particular, was largely pointless. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.


Light, Andrew, and Aurora Wallace, "Not Out of the Woods: Preserving the Human in Environmental Architecture," Environmental Values 14(2005):3-20. The North American environmental movement has historically sought to redress the depletion and degradation of natural resources that has been the legacy of the industrial revolution. Predominant in this approach has been the preservation of wilderness, conservation of species biodiversity and the restoration of natural ecosystems. While the results of such activity have often been commendable, several scholars have pointed out that the environmental movement has inherited an unfortunate bias against urban environments, and consequently, a blind spot to ways in which densely populated built spaces can serve to enhance rather than degrade efforts to achieve sustainability. After exploring this concern we argue that environmental architecture can serve as a counter-balance to this bias, focused, as it is, on the ways in which the construction and organisation of built spaces for humans can help or hinder the pursuit of environmental priorities. But if environmental architecture is to take this role then it must be understood in a broader context, one which does not exclude other moral, political and aesthetic values in the production of human environments. We will highlight several examples of how environmental architecture has combined success and failure at taking a broader view of environmental questions, with a specific focus on one green skyscraper that may be good for the natural environment but not necessarily for the human environment of the city. Light is in the Applied Philosophy Group, New York University, New York, NY. Wallace is in the Department of Culture and Communication, New York University, New York, NY. (EV)

Light, Andrew. "Callicott and Naess on Pluralism." Inquiry 39, no. 2 (June 1996): 273-94. The monism-pluralism debate in environmental ethics, first, as it has most recently been advanced by J. Baird Callicott in his "Moral Monism in Environmental Ethics Defended," Journal of Philosophical Research 19 (1994). Light assesses Callicott's claim that his communitarianism (combined with a limited intertheoretic pluralism) is sufficient to get the advantages of pluralism advocated by, among others, Stone, Weston, Brennan, Varner, and Hargrove. The author argues that Callicott's claims get us no further in taking up what could be the more important question in the monism-pluralism debate: how do we achieve a compatibilism among ethical theories which will inform better environmental practices? The paper argues, further, that Arne Naess, whose work has heretofore been excluded from the mainstream discussion of this issue, has all along understood the heart of the monism-pluralism question. All involved in the monism-pluralism debate would do well to look at what Naess has to say. (v7, #3)


Liburne, Geoffrey R., A Sense of Place: A Christian Theology of the Land (Nashville, TN: Abingdon, 1989). 139 pages. $ 10.95. Chapters: 1. From the secular city to a theology of the land. 2. The centrality of the land in aboriginal and Hebrew religion. 3. Shattering the territorial chrysalis: from the exile to the Christian scriptures. 4. The poetics of space: place and space in the Western tradition. 5. The Christification of holy space: incarnation and the land. 6. Defining incarnational praxis. An Australian theologian draws from the culture and literature of his native Australia to offer a vision of ecological responsibility that is biblical, practical, and poetic. Liburne is now professor of theology at the United Theological Seminary in Dayton, Ohio. (v1,#4)

Liburne, Geoffrey, "Ecotheology in Search of a Context: Land's Edge in Patrick White's Voss," Ecotheology Vol 6 (Jul 01/Jan 02):152-166. geofl@nsw.uca.org.au  This article reflects the ways in which contexts can be rendered for ecotheological work, on the assumption that ecotheology and contextual theology are inextricably linked. To be taken up into theological reflection, contexts require both mapping and creation. The dialectic of artistic images is explored in a popular religious song and Patrick White's novel, Voss in such a way as to propose methodological directions for ecotheological work in Australia and beyond.

Limbaugh, Ronald H., "Stickeen and the Moral Education of John Muir," Environmental History Review, vol. 15, no. 1, spring 1991. Stickeen was a dog who crossed a dangerous Alaskan glacier with Muir; Muir's account is interpreted as a classic commentary on the rights of animals and their place in nature. Limbaugh is professor of history at the University of the Pacific and a Muir authority. (v2,#2)

Lime, David W., ed., Managing America's Enduring Wilderness Resource. Proceedings from the September 1989 conference in Minneapolis and northern Minnesota. 118 papers, 700 pages, $32.50. Order from University of Minnesota, Distribution Center, Coffrey Hall, 1420 Eckles Avenue, St. Paul, MN 55108. (v1,#2)


Lindberg, David C., "Early Christian Attitudes toward Nature." Pages 47-56 in Gary R. Ferngren, ed, Science and Religion: A Historical Introduction (Baltimore: Johns Hopkins University Press, 2002). These attitudes are often depicted as being anti-rationalist and anti-scientific, by selective quotation from Tertullian (c. 160-c. 220 A.D). In fact, these attitudes were a great deal more complicated and more interesting. Lindberg is in history and philosophy of science University of Wisconsin at Madison. (v. 15, # 3)


Lindemayer, David B., and Joern Fisher. Habitat Fragmentation and Landscape Change: An Ecological and Conservation Synthesis. Washington, DC: Island Press, 2006. This is an up-to-date overview of habitat loss, subdivision, isolation, and degradation that is accessible to non-specialists.

Linden, Eugene, "The Road to Disaster," Time, Oct. 16, 2000, vol. 156, no. 16, pp. 96-98. Paving the last 435 miles of BR-163, connecting Cuiaba with the TransAmazon highway, could open up the Pantanal to uncontrolled development, over half a million square miles in a region especially prone to burning. (v.11,#4)

Linden, Eugene, "Burned by Warming," Time, March 14, 1994. Big losses from violent storms make insurers take global change seriously. The insurance business is first in line to be affected by climate change; it could bankrupt the $ 1.41 trillion industry. Europe's insurance giants have already begun to lobby governments to take action. One big concern is the loss of the sand barriers that protect insured property along the coasts. With 50% of the U.S. population living within 50 miles of a coastline, sea level is now at the highest mark in the past 5,000 years and is rising as much as ten times as fast as before. (v5,#1)

Linden, Eugene, "Can Animals Think?" cover story in Time, March 22, 1993. After years of debate, ingenious new studies of dolphins, apes, and other brainy beasts are convincing many scientists that the answer is yes. Dolphins, chimps, parrots, sea lions, dogs. Why intelligence evolved. "If the notion that animals might actually think poses a problem, it is an ethical one. The great philosophers, such as Descartes, used their belief that animals cannot think as a justification for arguing that they do not have moral rights. It is one thing to treat animals as mere resources if they are presumed to be little more than living robots, but it is entirely different if they are recognized as fellow sentient beings. Working out the moral implications makes a perfect puzzle for a large-brained, highly social species like our own." (v4,#1)

Linden, Eugene, "Tigers on the Brink," Time, March 28, 1994. The cover story. Once considered a success story, tigers are again sliding toward extinction. This time the world's nations may not be able to save the great cats. Populations have declined 95% in this century; the two main factors are loss of habitat and a ferocious black market in body parts, especially bones and
other parts used in traditional medicine and folklore in China, Taiwan, and Korea. A tragic story of human stupidity driving these majestic animals to extinction. (v5,#1)

Linden, Eugene. "Global Fever." Time, July 8, 1996, pp. 56-57. Climate change threatens more than megastorms, floods, and droughts. The real peril may be disease. Bugs, germs, and other pests may thrive. (v7, #3)


Lindzey, Andrew and Cohn-Sherbok, Dan, After Noah: Animals and the Liberation of Theology, London: UK: Cassells and in US distributed by Continuum, 1997. (v.10,#2)

Line, Les, "Peru: Epicenter of El Nino, Fears for its Wildlife," New York Times, May 19, 1998, B12. Some lean years lie ahead for seals, sea lions, penguins, and other beach dwellers if ocean waters get warmer. A severe year-long food shortage has resulted from record high water temperatures, and many animals are dying, especially the young. Some scientists predict even stronger and more frequent El Ninos. (v9,#2)

Line, Les, "Twilight of America's Grasslands," National Wildlife 35(no. 3, April/May 1997):20-29. Of the original tall-grass prairie, in most states only one or two percent survive, and a surprising amount of habitat and biodiversity has been lost in recent years. The current plight of grassland birds is the most neglected conservation problem in America. Even on agricultural lands that once supported such birds, new agricultural practices, such as earlier and more frequent mowing, are decimating the remaining birds. (v8,#1)

Lines, William J., Taming the Great South Land: A History of the Conquest of Nature in Australia. Athens, GA: University of Georgia Press, 1999. 384 pp. $18.95. Australia's history from the continent's geological origins, natural development, and earliest native cultures to its present-day state of population and economic overgrowth at the expense of the fragile environmental balance. (v.10,#1)

Linklater, WL, "Wanted for Conservation Research: Behavioral Ecologists with a Broader Perspective", BioScience 54 (no.4, 2004): 352-360(9). Behavioral ecologists have advocated a greater role for behavioral research in conservation, and the contribution of behavioral study to conservation has increased dramatically. However, a review of the literature in the fields of behavioral ecology and conservation finds that half the articles that investigate behavior in conservation journals do not advance beyond the descriptive phase (compared with 14 percent in behavioral ecology journals) and that most articles in behavioral ecology journals (71 percent) are narrowly focused on questions about the adaptive value of behavior, whereas conservation biology journals include more diverse interests such as causative and developmental mechanisms (43 percent). Addressing this mismatch between the disciplines is the key to improving the utility of behavioral ecology in conservation. The solution I propose is a renewed appreciation of Tinbergen's paradigm, both in behavioral ecology, where it can encourage more pluralistic research by integrating proximate and evolutionary questions, and in conservation biology, where it can structure the advance from descriptive studies of behavior to behavioral problem solving.


Lintott, Sheila. "Toward Eco-Friendly Aesthetics." Environmental Ethics 28(2006):57-76. Environmentalists can make individuals more eco-friendly by dispelling many of the myths and misconceptions about the natural world. By learning what in nature is and is not dangerous, and in what contexts the danger is real, individuals can come to aesthetically appreciate seemingly unappreciable nature. Since aesthetic attraction can be an extremely valuable tool for environmentalists, with potential beyond that of scientific education, the quest for an eco-friendly is neither unnecessary nor redundant. Rather, an eco-friendly aesthetic ought to be pursued in conjunction with other efforts to protect nature. (EE)

Linville, Mark D. "A Little Lower Than the Angels: Christian Humanism and Environmental Ethics," Christian Scholars Review 28(No.2. 1998):283-297. In contrast to Lynn White, Jr., who argues that Christianity is the most anthropocentric of the world's religions and that the West's acceptance of this humanistic approach is responsible for our ecologic crisis, Linville offers an account of human flourishing that includes environmental values and argues that a properly circumspect account of humanism provides an adequate grounding for an environmental ethic. (v.11,#2)


Linzey, Andrew, and Tom Regan, eds. Love the Animals: Meditations and Prayers (New York: Crossroad, 1989). (v1,#1)


Linzey, Andrew, and Cohn-Sherbok, Dan, *After Noah: Animals and the Liberation of Theology*. London: Mowbray, 1997. Also: New York: Cassell/Continuum. 156 pages. Jewish and Christian traditions have often been blamed for justifying the abuse of animals. While some theologians have been negative about animals, there are ample resources within both traditions to support an enlightened and ethical view of animals. The way we treat animals is a benchmark for the kind of society we are; our attitudes toward animals can liberate theology from an obsessive and idolatrous humanism. (v.9,#4)


Linzey, Andrew, *Animal Theology* (London: SCM Press, 1994 and Urbana, IL: University of Illinois Press, 1994). "The idea that the specifically animal creation should be the subject of honour and respect because it is created by God, however elementary that idea may now appear to us, is not one that has been given endorsement throughout centuries of Christian thought. Whilst it can be claimed to have some grounding in scripture, in, for example, the psalmist's sense of wonder and beauty of God's creation and in the regard that Jesus claimed even for the sparrows, these intimations have never been developed into systematic theological thought, still less full-blown doctrine." "Are we not to celebrate the life of creation with all its beauty, magnificence and complexity and therein ... to perceive signs of the grandeur of God? Is not the biblical material right to point us to the ways in which some animals at least appear to provide moral examples for our own behaviour? Is not the story of Balaam's ass a sign of how morally advanced are the beasts compared to the mindless Balaams of our world?" "Christians have so little to contribute to the contemporary debate about animals because they have failed to think theologically afresh." Linzey is at Mansfield College, Oxford. (See story above, on the new fellowship in ethics and animals there.)


Liou, J.-C., and N. L. Johnson, "Risks in Space from Orbiting Debris," *Science* 311 (20 January 2006): 340-341. Lots of space junk out there, over 9,000 pieces large enough to track, which requires a major tracking enterprise, lest these hit other satellites. And these pieces are increasingly colliding other and breaking up.


Lipschutz, Ronnie D., with Mayer, Judith. *Global Civil Society and Global Environmental Governance: The Politics of Nature from Place to Planet*. Albany, New York: State University of New York Press, 1996. 320 pages. $18.95 paperback, $57.50 hardcover. Neither world government nor green economics can protect the global environment. Political action through community and place-based organizations and projects and people acting together locally can have a cumulative impact on environment quality that is significant, long lasting, and widespread. (v7, #3)


Lipske, Mike, "Cutting Down Canada," *International Wildlife*, March/April 1994. What's about to happen to vast northern forests will make tropical rain forest look like conservation zones. In Alberta, 23% of the province is under lease for eventual logging. In British Columbia, one year's cut on public lands is more than twice the harvest from all the national forests in the U.S. A new mill in Alberta, the Alberta-Pacific Mill, or Al-Pac, built for $ 1.3 billion, consumes 120 square kilometers (about 45 square miles) of forest per year. Lipske is a former senior editor of *International Wildlife*. (v5,#2)

Liptak, Adam, "Saving Seeds Subjects Farmers to Suits over Patent," *New York Times*, Nov. 2, 2003, p. 14. In 1998, Homan McFarling, Tupelo, Mississippi, bought bags of genetically altered soybean seeds, planted a crop, and did what he has always done, saved some seeds and replanted them the next year. But Monsanto has a patent on Roundup Ready soybeans and sued him in federal court for $ 780,000. If the court rules against him, he will be forced into bankruptcy. A Monsanto spokeswoman said that Monsanto invested hundreds of millions of dollars to develop the product, and needs to recover its investment, so that Monsanto can contribute to the next wave of products. (v.14, #4)


Liss, Peter S., and Duce, Robert A., eds. *The Sea Surface and Global Change*. New York: Cambridge University Press, 1996. 496 pages. $74.95 cloth. The first comprehensive review of the surface microlayer in a decade. The authors address the potential global marine impacts at the air-sea interface due to largescale atmospheric ozone depletion and industrial pollution. (v7, #3)

List, Charles J., "On the Moral Significance of a Hunting Ethic," *Ethics and the Environment* 3(1998):157-175. This paper challenges the claim made by critics and some defenders of hunting, that any ethical code hunters chose to follow is irrelevant to the issue of the morality of hunting. My case is made by (1) constructing a hunting code which meets certain prominent objections to their moral significance, (2) conceptually tying this code to an environmental ethic--Leopold's land ethic, and (3) tying the land ethic to a traditional moral theory--Aristotelian virtue ethics. So, the constructed code is morally significant because it is consistent with and made intelligible by a standard moral theory. List is in philosophy, Plattsburgh State University of New York, Plattsburgh, NY. (E&E)

List, Charles J. "Is Hunting a Right Thing?" *Environmental Ethics* 19(1997):405-416. I argue that sport hunting is a right thing according to Leopold's land ethic. First, I argue that what Leopold means by a "thing" ("A thing is right . . .") is not a human action, as is generally assumed, but rather a practice of conservation that is an activity connecting humans to the land. Such an "outdoor" activity emphasizes internal rewards and the achievement of excellence according to standards which at least partially define the activity. To say that hunting is a right thing is to say that the practice of sport hunting tends in the direction of the land ethic. The actions of individual hunters are judged to be ethical or not by the standards of the practice; these standards are in turn evaluated by the precepts of the land ethic. Second, I discuss how the practical standards are evaluated. I argue that the concepts of integrity, stability, and beauty, contrary to some interpretations, are not inherent values of the biotic community, but rather labels carefully chosen by Leopold as three conduits for the ecological conscience necessary for the land ethic: the ethical, the ecological, and the aesthetic. I show that Leopold uses this model for his own evaluation of the practice of hunting as well as his evaluation of other practices of conservation. Thus, to ask about whether sport hunting is a right thing is to ask about the historical evolution of the standards of this practice and, of equal importance, about the future direction of these standards with regard to the land ethic. List is in philosophy at the State University of New York, Plattsburgh, NY. (EE)

List, Charles J. "The Virtues of Wild Leisure." *Environmental Ethics* 27 (2005):355-373. The land ethic of Aldo Leopold has increasingly received attention as an example of an environmental virtue ethic. However, an important remaining question is how to cultivate and transmit environmental virtues. The answer to this question can be found in the pursuit of wild leisure. The classical view of leisure primarily as articulated in Aristotle's Politics provides a good starting point for an examination of wild leisure. Leopold thought wild leisure was important and associated it with his land ethic. Leopold's view of wild leisure focused on the role of perception in ecological education and the habituation of virtue. The classical virtue of moderation when habituated by wild leisure becomes the central virtue required by an ecological conscience. Wild leisure educates just those intellectual and scientific virtues necessary for refined perception and prudence. These virtues provide connections between good citizenship and land citizenship. (EE)

List, Charles. "On the Moral Distinctiveness of Sport Hunting." *Environmental Ethics* 26(2004):155-169. Although controversy concerning the morality of hunting is generally focused on sport hunting, sport hunting itself is not a morally distinctive kind of hunting. The understanding of hunting in general needs to be supplemented with reference to the goods which hunting seeks. Attempts to draw a moral distinction between sport and subsistence hunting are inadequate and historically suspect. Likewise, trying to establish sport hunting as morally distinctive by emphasizing its similarities to other sports also fails. Nevertheless, there are standards accepted by hunters that support ethical judgments about hunting. Ethical hunting requires reentry into a community of nonhuman beings governed by ecology and evolution, not human constructs, the development of virtues such as tenacity, courage, moderation, and discipline, and the achievement of a heightened respect for the biotic community in which the hunt takes place. By means of such standards, we may yet be able to determine what good hunting is even though we are unable to determine whether sport hunting is good. (EE)


List, Peter, "Speaking out for Nature," Reflections 9 (Number 2, Spring, 2002):34-36. Encomium to Rachel Carson, whose career shows the need for scientists to speak out on behalf of nature. (v.13,#2)

List, Peter C., ed., Radical Environmentalism: Philosophy and Tactics. Belmont, CA: Wadsworth Publishing Co., 1993. 276 pages, paper. Sections on Deep Ecology (Arne Naess, Bill Devall, George Sessions), on Ecofeminism (Carolyn Merchant, Elizabeth Dodson Gray, Ynestra King, Karen J. Warren), on Social Ecology and Bioregionalism (Murray Bookchin, Jim Dodge, Kirkpatrick Sale, Judith Plant), on Radical Ecoactivism and Ecotactics (Greenpeace, Bob Hunter, Paul Watson) on the Monkey Wrench Gang (Edward Abbey), on the Sea Shepherd Society (Paul Watson), on Earth First! (Dave Foreman, Mike Roselle and the Middle Santiam Protest, George Draffan and the Cathedral Forest and Oregon Old Growth, on Redwood Summer), on Ecofeminist Activism (Pamela Philipose, Cynthia Hamilton, Chaia Heller), on Bioregionalist Activism (Peter Berg) and Responses (Eugene Hargrove, Edward Abbey, Dave Foreman, Michael Martin. List, as editor, says, "... understanding this movement can help 'moderates' sharpen their resolve to do more about environmental problems and find solutions which will check the relentless consumption of wild nature." Peter List is professor of philosophy at Oregon State University. (v3,#4)


List Peter, ed., "Environmental Advocacy by Environmental Scientists," a theme issue of Reflections, Newsletter of the Program for Ethics, Science, and Technology. Department of Philosophy, Oregon State University. Special Issue 4, April 2000. Fourteen short papers. Samples:
--Rolston, Holmes, III, "Environmental Science and Environmental Advocacy."
--Shrader-Frechette, Kristin, "Justice and Environmental Advocacy."
--Westra, Laura, "Advocacy as a Moral Obligation."
--Hollander, Rechelle E., "Toward a Model of Professional Responsibility." Quite usable with students, if you wish a unit on this issue in an environmental ethics or policy class. (v.11,#2)

List, Peter C., ed. Environmental Ethics and Forestry: A Reader. Philadelphia: Temple University Press, 2000. Paperback. 364 pages. The most comprehensive and concentrated mixture of science and conscience in forestry and philosophy anywhere available. During the last quarter century both forestry and philosophy have been rethinking their foundations; a principal focus is values carried by nature. A foreground conclusion of the contributors is that forestry needs philosophy to formulate an ethic, a background conclusion is that philosophy needs forestry to do the same. Throughout, here is ethics in practice.
Part 1: Ethical Systems in Forestry
1. THE ECONOMIC RESOURCE MODEL OF FORESTS AND FORESTRY
* Bernhard Fernow, Forest and Forestry Defined.
* Gifford Pinchot, The Use of the National Forests.
2. JOHN MUIR ON THE PRESERVATION OF THE WILD FORESTS OF THE WEST
3. ALDO LEOPOLD'S LAND ETHIC IN FORESTRY
* Aldo Leopold, The Land Ethic.
Part 11: Two Philosophical Issues in Forestry Ethics
4. MULTIPLE VALUES IN FORESTS
* Holmes Rolston III, Values Deep in the Woods.
* Holmes Rolston III, Aesthetic Experience in Forests.

5. THE RIGHTS OF TREES AND OTHER NATURAL OBJECTS
* Lawrence E. Johnson, Holistic Entities--Species.
* Lawrence E. Johnson, Ecointerests and Forest Fires.

Part III: Contemporary Forestry Ethics.

6. BASIC PRINCIPLES IN FORESTRY ETHICS
* Michael McDonald, First Principles for Professional Foresters.
* Paul M. Wood, "The Greatest Good for the Greatest Number": Is This a Good Land-Use Ethic?
* James E. Coufal, Environmental Ethics: Cogitations; and Ruminations of a Forister.
* The Ecoforestry Declaration of Interdependence.

7. CODES OF ETHICS IN FORESTRY, FISHERIES, AND WILDLIFE BIOLOGY
* Code of Ethics for Members of the Society of American Foresters.
* Code of Ethics, Oregon Chapter, American Fisheries Society.
* The Ecodeforester's Way.

8. ADOPTING A LAND ETHIC IN THE SOCIETY OF AMERICAN FORESTERS
* James E. Coufal, The Land Ethic Question.
* Norwin E. Linnartz, Raymond S. Craig, and M. B. Dickerman, Land Ethic Canon Recommended by Committee.
* Holmes Rolston III and James Coufal, A Forest Ethic and Multivalue Forest Management: The Integrity of Forests and of Foresters Are Bound Together.
* Raymond S. Craig, Further Development of a Land Ethic Canon.

9. ADVOCATING NEW ENVIRONMENTAL ETHICS IN PUBLIC NATURAL RESOURCE AGENCIES
* Kristin Shrader-Frechette, Ethics and Environmental Advocacy.
* AFSEE Vision: Strategy for Forest Service Reform.
* Jeff DeBonis, Speaking Out: A Letter to the Chief of the U.S. Forest Service.
* F. Dale Robertson, Chief Robertson Responds.
* A Combat Biologist Calls It Quits: An Interview with Al Espinosa.

10. ETHICAL ISSUES IN GLOBAL FORESTRY
* James L. Bowyer, Responsible Environmentalism: The Ethical Features of Forest Harvest and Wood Use on a Global Scale.
* Alastair S. Gunn, Environmental Ethics and Tropical Rain Forests: Should Greens Have Standing?
* Doug Daigle, Globalization of the Timber Trade.

11. NEW FORESTRY, NEW FOREST PHILOSOPHIES
* Alan G. McQuillan, Cabbages and Kings: The Ethics and Aesthetics of New Forestry.
* Stephanie Kaza, Ethical Tensions in the Northern Forest.

EPILOGUE
* Kathleen Dean Moore, Traveling the Logging Road, Coast Range. (v.11,#4)

Liszka, James Jakob, "The narrative ethics of Leopold's Sand County Almanac," Ethics and the Environment 8(no. 2, 2003):42-70. There is a normative argument present throughout the Sand County Almanac. In fact the shack stories may be more persuasive, with a subtlety and
complexity not available in his prose "Land Ethic." This paper develops a narrative ethics methodology gleaned from rhetoric theory, and current interest in narrative ethics among literary theorists, in order to discern the normative underpinnings of the stories in Part 1. The narrative ethics approach sidesteps the need to ground the land ethic in ethical theory—which has been a reconstructive and problematic task for the philosophical interpreters of Leopold—and suggests, instead, that it emerges in Leopold’s very effort to narrate his, professional, personal, and practical experience with nature. This involves examining the stories in terms of their emotional, logical, and performative aspects. The result is an analysis that shows not only how these stories express normative claims, but also justify them. In the narratives, individuals are shown not merely to be means to the ecological whole, but the focus of sympathy and concern, in a manner that demands their good should also be an object of moral consideration. Liszka is in philosophy, University of Alaska, Anchorage. (E&E)


Little, Charles E. Greenways for America. Baltimore: John Hopkins University Press, 1995. The history, the examples, and the practical methods for open-space recreation planners. Little describes dozens of greenway projects that have improved local economies, and preserved outdoor space for millions of citizens. Little is an author and journalist specializing in American life and history and the environment. (v7,#1)

Little, Charles E. The Dying of the Trees: The Pandemic in America’s Forests. New York: Viking, 1995. 274 pages. $ 22.95. In the East, along the spine of the Appalachians, the dogwood are dead and dying from a disease called anthracnose, while acid deposition is killing red spruce and balsam fir from Vermont to Virginia and the Carolinas. Soil disease is destroying the mixed mesophytic forests of West Virginia; in the upper Midwest, gypsy moths are devastating second-growth white pine. In Southern California and the Sierra Nevada, airborne pollutants are killing yellow pine and ponderosa pine; in the Rocky Mountains, spruce budworms and bark beetles have combined with a century of fires suppression to cripple the health of Douglas fir. In the Pacific Northwest, the ancient forests of Douglas fir and other old-growth species have been systematically obliterated by Forest Service timber policies. (v6,#3)

Little, Daniel, "Collective Action and the Traditional Village", Journal of Agricultural Ethics 1(1988):41-58. This article considers the dispute between "moral economy" and "rational peasant" theories of agrarian societies in application to problems of collective action. I offer an abstract model of a traditional village and assess the applicability of recent qualifications of the collective action argument to this model. Little is in philosophy and religion at Colgate University, Hamilton, NY.


Little, Jane Braxton, "Quiet! The Sounds of Nature are Harder to Hear," Wilderness, The Wilderness Society, 1999, pages 20-25. Increasing noise pollution in national parks and wilderness areas: commercial and military airplanes, tourist flights, ATV's, helicopters, snowmobiles, jet skis, and much more. Little is a freelance writer based in Plumas Country, CA. (v.10,#2)

Little, Jo, "Otherness, representation and the cultural construction of rurality," Progress In Human Geography, 23 (No. 3, 1999): 437-. (v.11,#4)

Little, SJ; Harcourt, RG; Clevenger, AP, "Do wildlife passages act as prey-traps?" Biological Conservation 107(no.2, 2002):135-145. (v.13, #3)


Liu, Guocheng, Chao Liancheng, Zhang Zhonglun and Ye Ping, Biosphere and Human Society (in Chinese). Beijing: People's Press, 1992. 4.65 yuan. 302 pages. ISBN 7-01-000807-8/B.70. Eleven chapters. Section 1 is on "Biosphere Laws." Section 2 is on "Interaction Connection between Human Society and the Biosphere." Section 3 is on "Modern Human Society Control and Adjustment, and Its Developmental Trend in Harmony with the Biosphere." The authors discuss the coordinated interrelationship between humans and the biosphere, argue for ways of establishing the scientific foundations of ecophilo sophy in China. This is said to be the first systematic work on the holistic interactions between human society and nature to be published in China. (China) (v3,#4)

Liu Er, "Some theoretical problems of nonanthropocentric environmental ethics", Studies and Exploration, 2002(6)


Liu, Jianguo, et al, "Protecting China's Biodiversity," Science 300(23 May 2003)1240-1241. China has over 30,000 species of vascular plants (behind only Brazil and Columbia) and perhaps half are endemics, including many archaic lines. China's biodiversity suffers from the explosive increase in the intensity and extent of human activities. Rangelands are severely overgrazed, wetlands are shrinking rapidly, and invasive species are increasingly a serious problem. Poaching of plants and wildlife is a problem. China has established 1,757 national and local nature reserves, about 13% of the nation's area, remarkable achievements given China's population and the pressing need for development. Most reserves are in the poorer areas. But the entire nature reserve system faces serious challenges. Liu is in fisheries and wildlife, Michigan State University, and many of the authors are Chinese.

Liu, Rei, Herrington, Lee P. "The Expected Cost of Uncertainty in Geographic Data", Journal of Forestry 94(no.12, 1996):27. (v7,#4)


Livesey, Sharon M and Kearins, Kate, "Transparent and Caring Corporations? A Study of Sustainability Reports by The Body Shop and Royal Dutch/Shell", Organization and Environment, 15, (No. 3, 2002): 233-58. This article analyzes sustainability values reports published by The Body Shop International and by the Royal Dutch/Shell Group. The authors show how corporate discourses expressed in these precedent-setting texts both reflect and influence sociopolitical struggle over the meanings and practices of sustainable development. Specifically, the authors examine metaphors of transparency and care used to describe corporate rationales for increasing stakeholder communication, including reporting. Drawing on distinct discursive domains of business accountancy and personal ethics and sentiment, these metaphors promise to reconstruct the interface between the firm and society. Exploring the quite different assumptions on which each of these metaphors relies and their implications for corporate practices of sustainable development, the authors consider whether sustainability values reporting and the dialogue that it claims to facilitate can promote more democratic and socially and environmentally responsive corporate decision making, even as they impose new forms of managerial control. Livesey is an associate professor of communication at Fordham University's Graduate School of Business in New York. Kearins is a senior lecturer in strategic management at the University of Waikato, Hamilton, New Zealand. (v.13, #3)

Livesey, Sharon, "Organizing and Leading the Grassroots: An Interview With Lois Gibbs", Organization and Environment 16 (no. 4, December 2003).

Livingston, John A., "Moral Concern and the Ecosphere." Alternatives Vol. 12, no. 2 (Winter 1985):3-9. A general review of several philosophical positions or "world-views" regarding humanity and the environment: resourcism, the development ethic, and shallow and deep environmentalism. (Katz, Bibl # 1)


Livingstone, David N., "Ecology and the Environment" (and Christian thought). Pages 345-355 in Gary R. Ferngren, ed, Science and Religion: A Historical Introduction (Baltimore: Johns Hopkins University Press, 2002). The relationship between environmental thinking and Christian theology has been historically complex. Some of these connections are explored through the metaphors of the Divine Economist, Mother Nature, and the Celestial Mechanic. In the last thirty years there has been the "greening" of theology. Livingstone is in geography and intellectual history, Queen's University, Belfast. (v. 15, # 3)


Lloyd, Jeremy, "Redneck for Wilderness: Earth First! Cofounder Dave Foreman on Being a True Conservative," The Sun, December 2005, pp. 4-11. Interview with Dave Foreman. "Aren't people ultimately going to ask what's in it for them?" "Yes, to a certain extent, but I think we can also challenge people with questions like 'Do we have the generosity of spirit and the greatness of heart to share the earth with other species?' That appeals to something deep in us. And that's the way religions have always approached problems: by appealing to something beyond self interest. I think conservationists used to do that more. That's part of the problem with the environmental movement today." "I've been a registered Republican all my life. As a college student in the sixties I ... worked on Barry Goldwater's campaign for president. I consider myself a true conservative. But true conservatism is dead in America."

Lloyd, Jillian, "When Saving a Species Proves To Be Hard on the Animals," Christian Science Monitor, Mar 11, 1999, p. 2. Loss of two lynxes in Colorado of five released in the San Juan Mountains raises questions about reintroduction efforts. "At the heart of the dispute is a troublesome question: Is it ethical to sacrifice the lives of individual animals to the larger goal of reviving a species?" George Byrne, Colorado biologist says, "There's no cookbook on this. We're only the second place ... to do a lynx reintroduction." A reintroduction in the Adirondack Mountains of New York failed after most of the lynx were hit by cars. A Defenders of Wildlife advocate, Nina Fascione: "Our position is very firm that it's a tragedy when an animal gets killed. But the overall good of the conservation of the species is the most important thing." See also: Bekoff, Marc, "Jinxed Lynx? Some Very Difficult Questions with Few Simple Answers," Boulder (Colorado) Daily Camera, January 24, 1999. (v.10,#1)


Lloyd, Jillia. "New Reason for Fighting Pollution (Hint: It's on the Horizon.)" Christian Science Monitor 89 (7 October 1997): 1, 4. For first time for purely aesthetic reasons, the EPA has proposed regulations to help clear the air in over 150 US national parks and wilderness areas, including the Grand Canyon, Big Bend, Yellowstone, and Yosemite. (v8,#3)

Lloyd, Catherine A., The Balance of Value to the Customer & the Environment for Undergrounding Overhead Lines (sponsored by Norweb), Master's Thesis, Department of Philosophy, Lancaster University, September 1990. (v7,#1)


Lo, Yeuk-Sze. "Natural and Artifactual: Restored Nature as Subject." Environmental Ethics 21(1999):247-266. It has been argued that human restoration of nature is morally problematic because artificially restored natural entities are artifacts, which are ontologically different from natural entities and hence essentially devoid of the moral standing that natural entities have. I discuss the alleged assimilation of restored natural entities to artifacts, and argue that it does not follow from the ontological differences, if any, between the artifactual and the natural that the former is morally inferior to the latter. This defense against the devaluation of restored natural entities is aimed at narrowing the ethical gap between the wild and the tamed, which is often endorsed by ecocentric environmental ethics. (EE)


Loaharanu, Paisan & Ahmed, Mainuddin, "Advantages and Disadvantage of the Use of Irradiation for Food Preservation", Journal of Agricultural and Environmental Ethics 4(1991):14-30. Food irradiation is a physical method of processing food (e.g. freezing, canning). It has been thoroughly researched over the last four decades and is recognized as a safe and wholesome method. It has the potential both of disinfecting dried food to reduce storage losses and disinfesting fruits and vegetables to meet quarantine requirements for export trade. Low doses of irradiation inhibit spoilage losses due to sprouting of root and tuber crops. Food-borne diseases due to contamination by pathogenic microorganisms and parasites of meat, poultry, fish, fishery products and spices are on the increase. Irradiation of these solid foods can decontaminate them of pathogenic organisms and thus provide safe food to the consumer. Irradiation can successfully replace the fumigation treatment of cocoa beans and coffee beans and disinfest dried fish, dates, dried fruits, etc. One of the most important advantages of food irradiation processing is that it is a cold process which does not significantly alter physico-chemical characters of the treated product. It can be applied to food after its final packaging. Similar to other physical processes of food processing, (e.g. canning, freezing), irradiation is a capital intensive process. Thus, adequate product volume must be made available
in order to maximize the use of the facility and minimize the unit cost of treatment. Lack of harmonization of regulations among the countries which have approved irradiated foods hampers the introduction of this technique for international trade. Action at the international level has to be taken in order to remedy this situation. One of the important limitations of food irradiation processing is its slow acceptance by consumers, due inter alia to a perceived association with radioactivity. The food industry tends to be reluctant to use the technology in view of uncertainties regarding consumer acceptance of treated foods. Several market testing and consumer acceptance studies have been carried out on food irradiation in recent years. These studies showed that, if the safety and the benefits of food irradiation were properly explained, the consumers were willing to accept irradiated foods. Considering its potential role in the reduction of post-harvest losses, providing safe supply of food and overcoming quarantine barriers, food irradiation has received wider government approvals during the last decade. There is also a trend towards increased commercialization of irradiated food. Currently, there are 47 irradiation facilities in some 23 countries being used for treating foods for commercial purposes.


Local Environment: The International Journal of Justice and Sustainability Vol. 12, no. 6 (2007). This is a special issue on environmental justice in Canada. Contents include: (1) Environmental Justice in Canada@ by Randolph Haluza-Delay (pp. 557-64), (2) Where the Waters Divide: First Nations, Tainted Water and Environmental Justice in Canada@ by Michael Mascarenhas (pp. 565-77), (3) Support for First Nations= Land Claims amongst Members of the Wilderness Preservation Movement: The Potential for an Environmental Justice Movement in British Columbia@ by Joanna L. Robinson, D.B. Tindall, Erin Seldat, and Gabriela Pechlaner (pp. 579-98), (4) Environmental Justice across the Rural Canadian Prairies: Agricultural Restructuring, Seed Production and the Farm Crisis@ by Lorelei L. Hanson (pp. 599-611), (5) Salmon Farming in First Nations= Territories: A Case of Environmental Injustice on Canada= s West Coast@ by Justin Page (pp. 613-26), (6) Arctic Climate Impacts: Environmental Injustice in Canada and the United States@ by Sarah F. Trainor, F. Stuart Chapin III, Henry P. Huntington, David C. Natcher, and Gary Kofinas (pp. 627-43), (7) Environmental Racialization: Linking Racialization to the Environment in Canada@ by Cheryl Teelucksingh (pp. 645-61), and (8) British Columbia is Open for Business=: Environmental Justice and Working Forest News in the *Vancouver Sun@* by Mark C.J. Stoddart (pp. 663-74).


Lockwood, Jeffrey A., "Not to Harm a Fly: Our Ethical Obligations to Insects." *Between the Species* 4 (1988): 204-211. An argument that insects have the necessary neurological structures for consciousness and/or sentience, and thus should be morally considerable. This absurdity supplants the "stop wild predation" argument as the reductio of the animal rights position. (Katz, Bibl # 2)

Lockwood, Michael, "End Value, Evaluation, and Natural Systems," *Environmental Ethics* 18(1996):265-278. I develop a general framework for natural and human values based on the position that end value is constructed by persons, but not wholly referent to them, identify and analyze three hierarchically related levels of end value in relation to the functional values which support them and the held and ascribed values generated by entities possessing teleological value, use this framework to indicate the context in which economic values should be located, and assess the implications of the framework for environmental policy and future valuation work. Lockwood is at the Johnstone Centre of Parks, Recreation, and Heritage, Charles Sturt University, Australia. (EE)

Lockwood, Michael. "Humans Valuing Nature: Synthesising Insights from Philosophy, Psychology and Economics." *Environmental Values* 8(1999):381-401. ABSTRACT: A rational process for assessment of environmental policy options should be based on an appreciation of how humans value nature. Increased understanding of values will also contribute to the development of appropriate ways for us to relate to and manage natural areas. Over the past two decades, environmental philosophers have examined the notion that there is an intrinsic value in nature. Economists have attempted to define and measure the market and nonmarket economic values associated with decisions concerning natural areas. Psychologists have tried to assess the extent to which people believe in an intrinsic value in nature, and have also begun to work with economists to improve nonmarket valuation techniques. I briefly review the contributions made to our understanding of natural area value by environmental philosophy, psychology and economics, and develop a model that integrates insights from these disciplines. Components in the model include cognitions, held values, assigned values and various modes of value expression. I make recommendations for future validation, development and use of the model. KEYWORDS: Intrinsic value, value expression, integrated evaluation. Michael Lockwood, Johnstone Centre Charles Sturt University PO Box 789, Albury, NSW 2640, Australia. (EV)

Lodahl, Michael E., "The Whole Creation Groans': Is There a Distinctively Wesleyan Contribution to an Environmental Ethic?" CTNS (Center for Theology and the Natural Sciences) Bulletin 18 (no. 2, 1999):10-19. Yes. A provocative Biblical passage is Romans 8.18-25, which was the text for John Wesley's 1781 sermon, "The General Deliverance," which can be a guide and touchstone for a Wesleyan environmental ethics. Lodahl is in theology at Northwest Nazarene College in Nampa, ID. (v.10,#1)


Lodge, David M., and Christopher Hamlin, eds., *Religion and the New Ecology: Environmental Responsibility in a World in Flux*. Notre Dame, IN: University of Notre Dame Press, 2006. An anthology bringing religion, especially Christianity, into conversation with the "new ecology" and its nature in flux, including both changes in wild nature and changes that humans introduce, contrasted (so many claim) with the old ecology that treasured a stable, pristine nature, uninterrupted by humans. Lodge is in biology, Hamlin in history, University of Notre Dame.


Lofstedt, Ragnar. "Sweden's Biomass Controversy: A Case Study of Communicating Policy Issues," Environment 40(no. 4, May 1998):16- . Sweden's efforts to shift to renewable sources of energy are being hampered by misunderstandings and distortions of the key issues involved. (v9,#2)

Lofstedt, Ragnar E., Sjostedt, G., eds. Environmental Aid Programmes to Eastern Europe: Area Studies and Theoretical Applications. Brookfield, Vt.: Ashgate, 1996. 240 pp. $67.95. This book combines a series of case studies within large theoretical sections to identify the mistakes that have been made in the field of environmental aid. It uses this to examine how these Eastern European nations can improve their environmental aid program overall. (v8,#2)

Loftin, Robert W., "The Medical Treatment of Wild Animals," Environmental Ethics 7(1985):231-239. The medical treatment of wildlife can only be justified from a perspective of animal rights individualism. Genuine environmental concern is for species and ecosystems, not individual animals. (Katz, Bibl # 1)


Loftin, Robert W. "The Morality of Hunting." Environmental Ethics 6(1984):241-50. In recent years, philosophers have begun to devote serious attention to animal rights issues. Most of the attention has focused on factory farming and animal experimentation. While many of the arguments used to justify sport hunting are shown to be spurious, the paper defends sport hunting on utilitarian grounds. The loss of sport hunting would also mean the loss of a major political pressure group working for the benefit of wildlife through the preservation of habitat. Peter Singer argues that "the shooting of a duck does not lead to its replacement by another." I argue that, on the contrary, the shooting of a duck leads to the production of other ducks and other life forms that are not shot at. Loftin is at the Philosophy Dept., University of North Florida, Jacksonville, FL. (EE)


Loftin, Robert W. "The Medical Treatment of Wild Animals." Environmental Ethics 7(1985):231-39. The medical treatment of wild animals is an accepted practice in our society. Those who take it upon themselves to treat wildlife are well-intentioned and genuinely concerned about their charges. However, the doctoring of sick animals is of extremely limited value and for the most part based on biological illiteracy. It wastes scarce resources and diverts attention from more worthwhile goals. While it is not wrong to minister to wildlife, it is not right either. The person who refuses to do so has not violated any moral duty and is not necessarily morally callous. The treatment of wildlife is based on the mistaken belief that value lies in individual wild animals rather than the entire ecosystem. The genuine concern of those who doctor wild animals should be channeled into more constructive directions. Loftin is at the Philosophy Dept., University of North Florida, Jacksonville, FL. (EE)

Loftin, Robert W., "The Morality of Hunting," Environmental Ethics 6(1984):241-250. A defense of sport hunting on utilitarian grounds. Sport hunters are interested in preserving habitats, and thus are inclined to support environmental causes. (Katz, Bibl # 1)

Loftin, Robert W., "Psychical Distance and the Aesthetic Appreciation of Wilderness." International Journal of Applied Philosophy 3, no. 1 (1986): 15-19. Wilderness must be approached and entered at the right "distance" for it to be appreciated, just as a work of art must be seen from the right distance. One cannot appreciate wilderness through pictures; one must enter it, illegally if necessary, to reduce psychical distance and to gain a full wilderness experience. (Katz, Bibl # 1)

Loftin, Robert W. "Scientific Collecting." Environmental Ethics 14(1992):253-64. Scientists often collect (kill) organisms in pursuit of human knowledge. When is such killing morally permissible? I explore this question with particular reference to ornithology and against the background of animal liberation ethics and a land ethic, especially Mary Anne Warren's account that finds the two ethics complementary. I argue that the ethical theories offered provide insufficient guidance. As a step toward the resolution of this serious problem, I offer a set of criteria to determine when collecting is morally permissible. Loftin is at the Philosophy Dept., University of North Florida, Jacksonville, FL. (EE)


Loftis, J. Robert. 2005. "Germ Line Enhancement of Humans and Nonhumans." Kennedy Institute of Ethics Journal 15 (1):57 76. The current difference in attitude toward germ line enhancement in humans and nonhumans is unjustified. Society should be more cautious in modifying the genes of nonhumans and more bold in thinking about modifying our own genome. I identify four classes of arguments pertaining to germ line enhancement: safety arguments, justice arguments, trust arguments, and naturalness arguments. The first three types are compelling, but do not distinguish between human and nonhuman cases. The final class of argument would justify a distinction between human and nonhuman germ line enhancement; however, this type of argument fails and, therefore, the discrepancy in attitude toward human and nonhuman germ line enhancement is unjustified. Loftis is in philosophy, St. Lawrence University.

Loftis, J. Robert, "Three Problems for the Aesthetic Foundations of Environmental Ethics," Philosophy in the Contemporary World 10 (no. 2, Fall-Winter 2003):41-50. A critical look at aesthetics as the basis for nature preservation, presenting three reason why we should not rely on aesthetic foundations to justify the environmentalist program. First, a comparison to other kinds of aesthetic value shows that the aesthetic value of nature can provide weak reason for action at best. Second, not everything environmentalists want to protect has positive aesthetic qualities. Attempts have been made to get around this problem by developing a reformist attitude towards natural aesthetics. These approaches fail. Third, development can be as aesthetically positive as nature. If it is simply beauty we are looking for, why can't the beauty of a well-constructed dam or a magnificent skyscraper suffice? Loftis is in philosophy, University of Alabama. (v.14, #4)

Logan, Bernard I., "Government Expenditures on Imported Inputs and the Goals of Food Self-Sufficiency and Food Security in the Southern African Development Co-ordination Conference", Journal of Agricultural Ethics 2(1989): This study is a broad examination of the relationship between government expenditures on imported inputs and the performance of the domestic food subsector. Because much data on government spending and agricultural production in Africa are unavailable, and those in published form are of suspect validity, the study is undertaken
largely as a conceptual overview. Logan is in geography at the University of Georgia, Athens. (v6,#3)

Logsdon, Gene. *At Nature's Pace*. Foreword by Wendell Berry. New York: Pantheon Books, 1994. 208 pp. $23 hardbound. Formerly an editor for *Farm Journal*, Logsdon is an ardent defender of the small traditional farm (the farm of fifty years ago), an honor he shares with Wendell Berry. Logsdon farms thirty acres in Ohio, and has written twelve books and hundreds of articles. The small farm is not dead, he argues; rather, the future will have more farmers, not fewer. Farms will be ecologically sane and community-interdependent. The error of the past was that farmers tried to live like city folks. The Amish have proved that farming is a decent living.

Loker, Cynthia A., Daniel J. Decker, R. Bruce Gill, Thomas D. I. Beck, and Len H. Carpenter, *The Colorado Black Bear Hunting Controversy: A Case Study of Human Dimensions in Contemporary Wildlife Management*. Ithaca, NY: Human Dimensions Research Unit, Cornell University, February 1994. HDRU Series No. 94-4. 56 pages. In November 1992, Colorado voters in public referendum by 2-1 banned black bear hunting in the spring, and the use of bait or dogs year round. There were four periods in the controversy, with the Colorado Wildlife Commission (a publicly appointed board) generally being inadequately sensitive to growing public concern, trying to conciliate by altering hunting season dates to reduce the kill of nursing females in the spring, while continuing to support the hunt. The Colorado Division of Wildlife made recommendations that the Wildlife Commission refused to hear. Biologists maintained that the bear population was not adversely affected by the hunt; hunters said they would not be bullied around by people who were really opposed to all hunting. The agency that was mandated to represent all citizens' interest in wildlife disproportionately represented hunter's interests, forcing citizens to take their concern to public referendum. There is also available an additional report that analyzes the views of differing segments of the voting public in this referendum. Copies from Human Dimensions Research Unit, Department of Natural Resources, Fernow Hall, Cornell University, Ithaca, NY 14853. Loker and Decker are with that unit, Gill, Beck, and Carpenter are with the Colorado Division of Wildlife. (v5,#2)


Lombard, AT; Johnson, CF; Cowling, RM; Pressey, RL, "Protecting plants from elephants: botanical reserve scenarios within the Addo Elephant National Park, South Africa," *Biological Conservation* 102 (no. ER2, 2001):191-203. (v.13,#1)

Lombardi, Louis G. "Inherent Worth, Respect, and Rights." *Environmental Ethics* 5(1983):257-70. Paul W. Taylor has defended a life-centered ethics that considers the inherent worth of all living things to be the same. I examine reasons for ascribing inherent worth to all living beings, but argue that there can be various levels of inherent worth. Differences in capacities among types of life are used to justify such levels. I argue that once levels of inherent worth are distinguished, it becomes reasonable to restrict rights to human beings. Lombardi is at the Philosophy Department, Lake Forest College, Lake Forest, IL. (EE)

Lombardi, Louis G., "Inherent Worth, Respect, and Rights," *Environmental Ethics* 5(1983):257-270. A further discussion of "biocentrism" based on the idea that there can be different levels of "intrinsic" or "inherent" worth, thus leading to different moral principles regarding different life forms. (Katz, Bibl # 1)

Lomborg, Bjorn, The Skeptical Environmentalist. See "Skeptical Environmentalist Labeled ‘Dishonest,’” Science 299 (1/17 /03):326. A Danish panel has judged Bjorn Lomborg's The Skeptical Environmentalist to be "scientifically dishonest." The Danish Research Agency’s Committee on Scientific Dishonesty received numerous complaints and as a result mounted a six month investigation of the book. It concluded that Lomborg was not deliberately deceptive but that he was guilty of "systematic one-sidedness." "Lomborg is highly selective in his use of references in practically every field he covers. This is not in accord with scientific standards." The committee chair was Hans Henrik Brydensholdt, a high-court judge. One commentator said: it’s "an unusually hard ruling by a committee known for being immensely difficult to convince of any wrongdoing."


Long, D. Stephen, Divine Economy: Theology and the Market. London: Routledge, 2000. A critique of contemporary capitalism and an argument that it must be baptized with Christian (if not Catholic) presumptions about the moral life. There are no objective perspectives (as postmodernists argue). Competing descriptions of the world cannot be objectively demonstrated to be either true or false. Rather, each narrator attempts to "out-narrate" the others and thereby persuade the listener. Scientific rationality, especially if claimed for the contemporary worldview, economics included, is but one tradition among others and should not have authority over modes of perception embodied in other traditions. Long argues (or at least narrates a story) that embodies concern for justice and community in economics, empowered by Christian vision, and hopes to persuade that this is a more attractive story to live by. Long teaches at Garrett-Evangelical Theological Seminary. (v.13,#2)


Loomis, John B. "Do Additional Designations of Wilderness Result in Increases in Recreation Use." Society & Natural Resources 12(no. 5, July 1999):481-. (v.11,#1)


Loomis, John, "How Bison and Elk Populations Impact Park Visitation: A Comparison of Results From a Survey and a Historic Visitation Regression Model", *Society and Natural Resources* 17(no.10, Nov-Dec 2004):941-949(9).

Loomis, John; Miller, Julie; Gonzalez-Caban, Armando; Champ, Joseph, "Testing the Convergent Validity of Videotape Survey Administration and Phone Interviews in Contingent Valuation," *Society and Natural Resources* 19 (no.4, Number 4/April 2006) :367-375 (9).


Lopez, Barry, ed. *The Future of Nature: Writing on a Human Ecology from Orion Magazine*. Minneapolis: Milkweed Editions, 2007. Contents include: (1) ARehabilitating Environmentalism@ by Peter Sauer, (2) AConsent of the Governed@ by Jeffrey Kaplan, (3) ABeyond Hope@ by Derrick Jensen, (4) ATPeople Make Them Strong@ by Laura Paskus, (5) AGot Tape?@ by BK Loren, (6) AA License to Be Human: An Interview with Van Jones,@ (7) AConservation Refugees@ by Mark Dowie, (8) AJerusalem for Belarus@ by Hope Burwell, (9) AMoving Mountains@ by Erik Reece, (10) AOn Thin Ice@ by Charles Wohlforth, (11) AThe Black Mesa Syndrome@ by Judith Nies, (12) AFaux Falls@ by Ginger Strand, (13) AThe Edges of the Civilization World@ by Alison Hawthorne Deming, (14) AOn Waste Lonely Places@ by John Landreth, (15) AA Word in Favor of Rootlessness@ by John Daniel, (16) AThe Riddle of the Apostle Islands@ by William Cronon, (17) ABeyond Ecophobia@ by David Sobel, (18) ACharlotte=s Webpage@ by Lowell Monke, (19) AThe Leadership Imperative: An Interview with Oren Lyons@ by Barry Lopez, (20) AAssailed@ by David James Duncan, (21) AThe Rise and Fall of Naturalized History@ by Robert Michael Pyle, (22) AThese Green Things= The San Francisco Garden Project@ by Cathrine Sneed, (23) ADesigner Genes@ by Bill McKibben, (24) AThe Pirates of Illiopolis@ by Sandra Steingraber, (25) ARadioactive Roundtrip@ by William L. Fox, (26) AWinged Mercury and the Golden Calf@ by Rebecca Solnit, (27) AIn the Name of Restoration@ by Marybeth Holleman, (28) ATalking at a Local Economy@ by Wendell Berry, (29) AThe Culture of Owning@ by Eric T. Freyfogle, (30) AListening to the Other@ by Gary Paul Nabhan, and (31) AStaying Put@ by Scott Russell Sanders.@ In the final section, each author provides commentary about her or his particular contribution.

Lorbiecki, Marybeth, *Aldo Leopold, A Fierce Green Fire*. Helena, MT: Falcon Press, 1996. $19.95. Good brief biography, with dozens of candid photos, and quotations from his work. (v9,#2)

Lord, Charles P. and William A. Shutkin. "Environmental Justice and the Use of History." *Boston College Environmental Affairs Law Review* 22 (no. 1, Fall 1994): 1-26. An analysis of two communities fighting for environmental justice reveals that a flawed or careless approach to history is often a root cause of environmental injustice. In each community, the legal system has perpetuated environmental injustice by misreading or disregarding that community's history. Communities fighting environmental injustice must vigorously prepare and proclaim their own histories and must urge courts and other decisionmakers to examine history carefully and justly. The two communities are one in inner-city South Boston and the Abenaki, a Native American tribe of northern New England. Lord and Shutkin are Visiting Scholars at Boston College Law School. (v6,#1)


Louv, Richard, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. Chapel Hill, NC: Algonquin Books of Chapel Hill, 2005. And, in addition, you may save them from attention deficit disorder, since a study by researchers at the Human-Environment Research Laboratory at the University of Illinois at Urbana-Champaign shows that children as young as five show a significant reduction in the symptoms of attention deficit disorder when they engage with nature.

Love, Thomas F., "Ecological Niche Theory in Sociocultural Anthropology: A Conceptual Framework and an Application," *American Ethnologist* 4(no. 1, Feb. 1977):27-40. The concept of "ecological niche" is frequently employed in sociocultural anthropology, but there have been few systematic applications of it. Love examines the utility of the concept for the analysis of social interaction and change, with special reference to complex societies. In a small agricultural valley of north California, competition between two status groups over a scarce resource--land--has led
to displacement and changing patterns of resource use. "Niche" describes the aggregate outcome of underlying processes of competition on the individual level. Love is a sociologist at the University of California, Davis.

Lovelock, James, "The Greening of Science," pages 39-63 in Wakeford, Tom, Walters, Martin eds., Science for the Earth: Can Science Make the World a Better Place? New York: Wiley, 1995. "I firmly believe that science is badly in need of greening and that everyone, including the greens, need science, but not the kind of science we now have. We want science to return to natural philosophy and be once again its old familiar and welcome part of our culture. Science must abandon its genteel posturing and come down to Earth again quite literally. This is not an easy task, it requires scientists to recognize that science has grown fat, lazy and corrupt and, like an obese atherosclerotic man, imagines that more rich food will cure his condition. That science should be in this condition is disastrous at this time in history, when more than ever we need firm guidance and a clear understanding of the Earth" (p. 39). Lovelock is an independent scientist, author of Gaia: A New Look at Life on Earth. (v9,#2)


Lovett, Gary M.; et al., "Forest Ecosystem Responses to Exotic Pests and Pathogens in Eastern North America," BioScience 56 (no.5, May 2006): 395-405 (11). The forests of eastern North America have been subjected to repeated introductions of exotic insect pests and pathogens over the last century, and several new pests are currently invading, or threatening to invade, the region. These pests and pathogens can have major short- and long-term impacts on forest ecosystem processes such as productivity, nutrient cycling, and support of consumer food webs. We identify six key features of the biology of exotic animal pests and the ecology of their hosts that are critical to predicting the general nature and severity of those impacts. Using three examples of introduced pests and pathogens in eastern forest ecosystems, we provide a conceptual framework for assessing potential ecosystem-scale effects.


Low, Mary, Celtic Christianity and Nature: The Early Irish and Hebridean Traditions. Edinburgh: University of Edinburgh Press, 1996. Also published in Northern Ireland: Belfast: The Blackstaff Press, 1996. 236 pages. , 12.95. Love of nature is often said to be one of the characteristic features of Celtic Christianity. Low describes how native beliefs about nature were rejected, transformed or restated as the peoples of early medieval Ireland and the Hebrides made
Christianity their own. She examines the importance of the land, hills and mountains, water, trees, fire, the sun and the elements in early Christian and biblical imagery. (v.8,#4)

Low, Nicholas, ed., *Global Ethics and the Environment*. London: Routledge, 2000. The impact of development in new industrial regions, impacts of single events such as the Chernobyl disaster on the global community, and the ethical relationship between human and non-human nature. Low is at the University of Melbourne. (v.11,#4)


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. (v5,#4)

Lowenthal, David, "Nature and Morality from George Perkins Marsh to the Millennium," Journal of Historical Geography 26(2000):3-27. George Perkins Marsh's Man and Nature was the first comprehensive study of human impacts on the natural environment, a remarkable work. Marsh stressed unforseen and unintended consequences, as well as the heedless greed of technological enterprise. Despite recent tendencies to belittle Marsh's insights as derivative elitist, anthropocentric, or narrowly utilitarian, he remains modern environmentalism's pre-eminent pioneer. Lowenthal is a geographer, University College, London.


Loy, David R., "The Religion of the Market," Journal of the American Academy of Religion 65(1997):275-290. The discipline of economics is less a science than the theology of the religion of the market. It's god, the Market, has become a vicious circle of ever-increasing production and consumption by pretending to offer a secular salvation. The Market is becoming the first truly world religion. Loy is in International Studies, Bunkyo University, Chigasaki, Japan. (v8,#3)

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. (v5,#4)


Lu, B. R. and Snow, A. A., "Gene Flow from Genetically Modified Rice and Its Environmental Consequences," Bioscience 55(no. 8, August 2005): 669-678. Within the next few years, many types of transgenic rice (Oryza sativa) will be ready for commercialization, including varieties with higher yields, greater tolerance of biotic and abiotic stresses, resistance to herbicides, improved nutritional quality, and novel pharmaceutical proteins. Although rice is primarily self pollinating, its transgenes are expected to disperse to nearby weedy and wild relatives through pollen mediated gene flow. Sexually compatible Oryza species often co occur with the crop, especially in tropical countries, but little is known about how quickly fitness enhancing transgenes will accumulate in these populations and whether this process will have any unwanted environmental consequences. For example, weedy rice could become much more difficult to manage if it acquires herbicide resistance, produces more seeds, or occurs in a wider range of habitats because of the spread of certain transgenes. Rice growing countries urgently need publicly available ecological assessments of the risks and benefits of transgenic rice before new varieties are released.


Lubchenco, Jane, "Entering the Century of the Environment: A New Social Contract for Science," Science 279(1998):491-497. As the magnitude of human impacts on the ecological systems of the planet becomes apparent, there is increased realization of the intimate connections between these systems and human health, the economy, social justice, and national security. The concept of what constitutes "the environment" is changing rapidly. Urgent and unprecedented environmental and social changes challenge scientists to define a new social contract. This contract represents a commitment on the part of all scientists to devote their energies and talents to the most pressing problems of the day, in proportion to their importance, in exchange for public funding. The new and unmet needs of society include more comprehensive information, understanding and technologies for society to move toward a more sustainable biosphere--one which is ecologically sound, economically feasible, and socially just.
New fundamental research, faster and more effective transmission of new and existing knowledge to policy- and decision-makers, and better communication of this knowledge to the public will all be required to meet this challenge. Lubchenco's presidential address to the American Association for the Advancement of Science, February 1997, and well worth study. Implications for the use of ecology in policy, for science and advocacy, science and conscience. Lubchenco has been president of the Ecological Society of America, is an active environmentalist, and was influential in the Society's policy statement that ecological research ought be devoted neither to sustainable development nor to pure science, but to a "sustainable biosphere." She is in zoology at Oregon State University, and her election as president of the American Association for the Advancement of Science is a tribute to her impact in her field, insisting on its relevance and on scientific responsibility. (v9,#1)


Lucas, Peter, This is not a Planet: Ethics and Environmentalism in the Age of the World Picture, Master's Thesis, Department of Philosophy, Lancaster University, September 1994. (v7,#1)

Lucas, Peter, "Valuing Birds in the Bush: For Pluralism in Environmental Risk Assessment," Environmental Values 11(2002):177-191. It is now widely acknowledged that social theorists can make an important contribution to our understanding of environmental risk. There is however a danger that the current ascendency of social theory will encourage a tendency to assimilate issues around environmental risk to those at stake in entrenched debates between realist and constructivist social theorists. I begin by citing a recent example of this trend, before going on to argue that framing the issues in terms of a monism/pluralism dichotomy would make for a more informative analysis. Noting that realists and constructivists can make common cause against risk monism, I turn, in the second half of the paper, to setting out a positive case for risk pluralism. Citing some fictional examples of risk behavior, I show how different individuals might rationally adopt different perspectives on the same risk. I conclude by exploring some implications of the truth of risk pluralism for two current approaches to environmental decision-making (which I term, respectively, the "teleological-pluralistic" approach, and the "economic-monistic" approach). I argue that the importance of risk pluralism lies in its capacity to highlight the shortcomings of the latter approach. (EV)


Lucas, Peter. "Environmental Ethics: Between Inconsequential Philosophy and Unphilosophical Consequentialism." Andrew Light and Eric Katz commend environmental pragmatism as a framework of choice for a more pluralistic, and (consequently) more practically effective environmental ethics. There is however a prima facie conflict between the promotion of pluralism and the promotion of pragmatism. I consider two different routes by which Light has attempted to resolve this conflict. Light's first strategy involves distinguishing philosophical from metaphilosophical forms of pragmatism, locating its "metatheoretically pluralist" potential in the latter. I argue that the distinction collapses, leaving the conflict unresolved. Light's second
strategy involves interpreting metatheoretical pluralism as a form of practical compatibilism. I argue that metatheoretical pluralism, thus interpreted, holds no remedy for the perceived practical ineffectiveness of the field. Not only would it fail to qualify as a viable form of pluralism, but its widespread adoption would actively undermine the real work of environmental ethics: that of fostering a sense of the special significance of enlightened and principled action in defense of environmentalist ideals, in the face of the consequentialism which dominates global environmental decision making. Environmental Ethics 24(2002):353-369. (EE)


Ludwig, Donald, Ray Holborn, and Carl Waters, "Uncertainty, Resource Exploitation, and Conservation: Lessons from History," Science 260 (April 2, 1993):17, 36. Short, excellent, powerful argument that everyone interested in environmental ethics and biological conservation should read. "There are currently many plans for sustainable use or sustainable development that are founded upon scientific information and consensus. Such ideas reflect ignorance of the history of resource exploitation and misunderstanding of the possibility of achieving scientific consensus concerning resources and the environment. Although there is considerable variation in the detail, there is remarkable consistency in the history of resource exploitation: resources are inevitably overexploited, often to the point of collapse or extinction. We suggest that such consistency is due to the following common features: (i) Wealth or the prospect of wealth generates political and social power that is used to promote unlimited exploitation of resources. (ii) Scientific understanding and consensus is hampered by the lack of controls and replicates, so that each new problem involves learning about a new system. (iii) The complexity of the underlying biological and physical systems precludes a reductionist approach to management. Optimal levels of exploitation must be determined by trial and error. (iv) Large levels of natural variability mask the effects of overexploitation. Initial overexploitation is not detectable until it is severe and often irreversible." (v4,#1)
Lueck, Thomas J., and Jennifer Lee, "No Fighting the Co-op Board, Even With Talons," New York Times, December 11, 2004, p. A1, B14. A famous red tail hawk, known as Pale Male, with his nest, has been removed from an uptown Manhattan apartment building, despite nesting there since 1991. The male hawk, and several different female mates, had sired 26 chicks, 23 of which lived to fledging. Protestors included the entertainer Mary Tyler Moore, who lives in the fancy apartment building. (v.14, #4)


Luke, Brian. "A Critical Analysis of Hunters’ Ethics." Environmental Ethics 19(1997):25-44. I analyze the "Sportsman's Code," arguing that several of its rules presuppose a respect for animals that renders hunting a prima facie wrong. I summarize the main arguments used to justify hunting and consider them in relation to the prima facie case against hunting entailed by the sportsman's code. Sport hunters, I argue, are in a paradoxical position—the more conscientiously they follow the code, the more strongly their behavior exemplifies a respect for animals that undermines the possibilities of justifying hunting altogether. I consider several responses, including embracing the paradox, renouncing the code, and renouncing hunting. Luke is in philosophy, University of Dayton, OH. (EE)


Luke, Timothy W., "'Deep Ecology: Living as if Nature Mattered': Devall and Sessions on Defending the Earth", Organization and Environment, 15, (No. 2, 2002): 178-86. The theory of deep ecology has had a profound effect on many environmental political movements over the past generation. While this notion was first advanced by Arne Naess in Western Europe, deep ecology found its broadest and most influential popularization, especially in North America, in the work of Bill Devall and George Sessions. Their 1985 work 'Deep Ecology: Living as if Nature Mattered', outlines their vision of deep ecology, and as an important source for anyone interested in the ethics and politics of deep ecology, is summarized and evaluated here. Luke is a university-distinguished professor of political science at Virginia Polytechnic University and State University in Blacksburg, Virginia. (v.13, #3)


management in decades, recently began to remake their image by moves towards more ecological and sustainable practices. As this cultural critique shows, however, the continued production of SUVs, a highly profitable but possibly anti-ecological pursuit, is not the only contradiction in Ford's quest to reinvent itself as a green business leader. Its core belief (that the world can and should accommodate the desires of mobile consumers, most of whom are both auto enthusiasts and environmentalists) serves as a severely limiting condition. Ford's innovations are noteworthy, but its approach falls short of what is needed from big business to help create a more ecological society. Luke is a University Distinguished Professor of Political Science at Virginia Polytechnic Institute and State University in Blacksburg, Virginia. (v.13,#2)


Lund, Vonne, Sven Hemlin and James White, "Natural Behavior, Animal Rights, or Making Money - A Study of Swedish Organic Farmers' View of Animal Issues," Journal of Agricultural and Environmental Ethics 17(2004):131-156. A questionnaire study was performed among Swedish organic livestock farmers to determine their view of animal welfare and, other ethical issues in animal production. The questionnaire was sent to 56.5% of the target group and the response rate was 75.6%. A principal components analysis (exploratory factor analysis) was performed to get a more manageable data set. A matrix of intercorrelations between all pairs of factors was computed. The factors were then entered into a series of multiple regression models to explain five dependent variables. Respondents were well educated and had long experience of farming. 81% were full-time farmers. They generally had a very positive attitude towards organic animal husbandry. They considered allowing animals their natural behavior a central aim, which is in accordance with organic philosophy. Farmers tended to be less approving of concepts like animal rights, dignity, and intrinsic value. When analyzing correlations between the factors, two groups of farmers emerged that were only partially correlated, representing different attitudes and behavioral dispositions. These may be interpreted as two subpopulations of organic livestock farmers in Sweden: those who saw organic farming as a lifestyle ("pioneer attitude") and entrepreneurs, who considered making money and new challenges more important. Their view of animal welfare differed. While the pioneers considered natural behavior a key issue, this was less important to the entrepreneurs, who also had a more approving attitude towards invasive operations such as castration and were more critical of the organic standards. Keywords: animal ethics, attitude, natural behavior, organic animal husbandry, organic farming, organic livestock production, questionnaire study. The authors are at the National Veterinary Institute, Oslo, Norway. (JAEE)

Lund, Vonne, Raymond Anthony, and Helena Rocklinsberg, "The Ethical Contract as a Tool in Organic Animal Husbandry," Journal of Agricultural and Environmental Ethics 17(2004):23-49. This article explores what an ethic for organic animal husbandry might look like, departing from the assumption that organic farming is substantially based ecocentric ethics. We argue that farm animals are necessary functional partners in sustainable agroecosystems. This opens up additional ways to argue for their moral standing. We suggest an ethical contract to be used as
a complementary to the ecocentric framework. We expound the content of the contract and end by suggesting how to apply this contract in practice. The contract enjoins us to share the wealth created in the agroecosystem (our joint contributions) by enjoining us to care for the welfare and needs of the individual animal, and to protect them from exploitation (just as human co-workers should not be exploited). The contract makes promoting good animal welfare a necessary condition for benefiting farm animals. Animals for their part are guaranteed coverage under the contract so long as they continue to contribute to the system with products and services. Keywords: animal welfare, contract ethics, organic animal husbandry, organic farming, organic livestock production. The authors are in the Department of Animal Environment and Health, Swedish University of Agricultural Sciences, Skara, Sweden. (JAEE)

Lundmark, C, "Improving the Science Curriculum with Bioethics," Bioscience 52(no.10, 2002): 881-.


Lundy, Patricia. Debt and Ecological Destruction. Brookfield, VT: Ashgate, 1997. 200pp. $9.95 cloth. Based on original research carried out during 13 months of fieldwork in Jamaica, this book examines the damage to the social environment and ecology of the island and also identifies a new social movement of community environmental groups. Lundy is at Queen's University, Belfast, Northern Ireland. (v8,#1)

Luo, Yigi et al., "Progressive Nitrogen Limitation of Ecosystem Responses to Rising Atmospheric Carbon Dioxide", BioScience 54 (no. 8, 1 August 2004):731-739(9). A highly controversial issue in global biogeochemistry is the regulation of terrestrial carbon (C) sequestration by soil nitrogen (N) availability. This controversy translates into great uncertainty in predicting future global terrestrial C sequestration. We propose a new framework that centers on the concept of progressive N limitation (PNL) for studying the interactions between C and N in terrestrial ecosystems. In PNL, available soil N becomes increasingly limiting as C and N are sequestered in long-lived plant biomass and soil organic matter. Our analysis focuses on the role of PNL in regulating ecosystem responses to rising atmospheric carbon dioxide concentration, but the concept applies to any perturbation that initially causes C and N to accumulate in organic forms. This article examines conditions under which PNL may or may not constrain net primary production and C sequestration in terrestrial ecosystems. While the PNL-centered framework has the potential to explain diverse experimental results and to help researchers integrate models and data, direct tests of the PNL hypothesis remain a great challenge to the research community.

Luoma, Jon R., "Habitat Conservation Plans: Compromise or Capitulation?" Audubon 100 (no. 1, January-February 1998):36-51. Habitat Conservation Plans, sweeping regulatory arrangements, are fast becoming the new standard for ecosystem protection. In the past four years more than 400 have been approved or set in motion. But are they a great leap forward or a sellout of endangered species? Although in principle, they protect habitat and many species at the ecosystem level, and are praised as a win-win situation, in practice skeptics worry that species protection is becoming driven less by law and science, more by the backrooms deals cut between federal bureaucrats and developers and their lawyers. Especially objectionable is
the Babbitt innovation of "no surprises" clauses, which locks in the agreed arrangements for a century, once the deal is struck. For all intents and purposes, landowners are absolved of any future liability under the Endangered Species Act. Critics also complain the HCP's are rushed through without adequate study, and, under these circumstances, surprises are to be expected. In a forceful letter to Congress, 167 scientists, mostly conservation biologists, complained that the "no surprises" clause "proposes a world of certainty that does not, has not, and never will exist... because we will always be surprised by ecological systems." (v.8,#4)


Luper-Foy, Steven. "Natural Resources, Gadgets and Artificial Life." Environmental Values 8(1999):27-54. ABSTRACT: I classify different sorts of natural resources and suggest how these resources may be acquired. I also argue that inventions, whether gadgets or artificial life forms, should not be privately owned. Gadgets and life-forms are not created (although the term "invention" suggests otherwise); they are discovered, and hence have much in common with more familiar natural resources such as sunlight that ought not to be privately owned. Nonetheless, inventors of gadgets, like discoverers of certain more familiar resources, sometimes should be granted exclusive but temporary control over their inventions as an incentive for making unknown items widely accessible. KEYWORDS: Artificial life, patents, ownership, natural resources, intellectual property, justice.

Steven Luper, Department of Philosophy Trinity University San Antonio, Texas 78212, USA email: sluper@trinity.edu (EV)

Luper-Foy, Steven. "Justice and Natural Resources," Environmental Values Vol.1 No.1(1992):47-64. ABSTRACT: Justice entitles everyone in the world, including future generations, to an equitable share of the benefits of the world's natural resources. I argue that even though both Rawls and his libertarian critics seem hostile to it, this resource equity principle, suitably clarified, is a major part of an adequate strict compliance theory of global justice whether or not we take a libertarian or a Rawlsian approach. I offer a defence of the resource equity principle from both points of view. KEYWORDS: Environmental ethics, future generations, justice, natural resources. Department of Philosophy, Trinity University, San Antonio, Texas 78212.


Lutherer, Lorenz Otto and Margaret Sheffield Simon, Targeted: The Anatomy of an Animal Rights Attack. Norman, Oklahoma: University of Oklahoma Press, 1993. Animal rights activists have broken into more than eighty research and educational institutions in the United States in the last ten years, stealing (the authors maintain) hundreds of research animals and destroying millions of dollars’ worth of property. An analysis of the goals and tactics of the animal rights movement. (v4,#4)


Lutz, Wolfgang, ed. The Future Population of the World: What Can We Assume Today? London: Earthscan Publications Ltd., 1996. 500pp. 50cloth, 24.95paper. An analysis of the components of population change--fertility, mortality and migration--and translates them into projections for 12 world regions. The projections by the world's leading demographers, are the first explicitly to take into account the possible environmental limits to growth. (v8,#1)

Lutzenberger, José, "Ciência, Ética e Meio Ambiente" (Science, Ethics, and the Natural Environment). Pages 101-116 in Revista do Instituto de Filosofia e Ciências Humanas da Universidade Federal do Rio Grande do Sul (Review of the Institute of Philosophy and Human Sciences of the Federal University of Rio Grande do Sul, Porto Alegre, Brazil), Vol. 15, 1992. ISSN 0302-217X. By the former Secretary for the Natural Environment of Brazil, who considers himself a deep ecologist, and who was removed from office for his environmentalist policies, by a president of Brazil, since removed for corruption. (v4,#4)


Lydeard, C.; Cowie RH; Ponder WF; Bogan AE; Bouchet P; Clark SA; Cummings KS; Frest TJ; Gargominy O; Herbert DG; Hershler R; Perez KE; Roth B; Seddon M; Strong EE; Thompson FG, "The Global Decline of Nonmarine Mollusks", BioScience 54 (no.4, 2004): 321-330(10). Invertebrate species represent more than 99 of animal diversity; however, they receive much less publicity and attract disproportionately minor research effort relative to vertebrates. Nonmarine mollusks (i.e., terrestrial and freshwater) are one of the most diverse and imperiled groups of animals, although not many people other than a few specialists who study the group seem to be aware of their plight. Nonmarine mollusks include a number of phylogenetically disparate lineages and species-rich assemblages that represent two molluscan classes, Bivalvia (clams and mussels) and Gastropoda (snails, slugs, and limpets). In this article we provide an overview of global nonmarine molluscan biodiversity and conservation status, including several case studies documenting the diversity and global decline of nonmarine mollusks. We conclude with a discussion of the roles that mollusks and malacologists should play in conservation, including research, conservation management strategies, and education and outreach.

Lydard, Charles and Mayden, Richard L., "A Diverse and Endangered Aquatic Ecosystem of the Southeast United States," Conservation Biology 9(1995):800-805. There is an extraordinarily diverse and endangered ecosystem in the United States, the rivers and streams of Alabama and adjoining states. Relative to North America as a whole, Alabama is a highlight of biotic diversity, with much of this diversity imperiled. The biodiversity crisis is not limited to tropical forests, but is right in Americans' own backyards. Lydeard and Mayden are in the Aquatic Biology Program, Department of Biological Sciences, University of Tuscaloosa, Alabama. See also Stolzenburg, William, "Sweet Home Alabama," Nature Conservancy 47(no. 4, Sept./Oct 1997):8-9.

Lyman, RL; Wolverton, S, "The Late Prehistoric-Early Historic Game Sink in the Northwestern United States," Conservation Biology 16(no.1, 2002):73-85. (v.13, #3)

Lyman, Howard F., "Mad Cows or Mad World?", The Animals' Agenda 16(no.4, 1996):26. The latest outbreak of mad cow disease in Britain, and the likely link to a human brain disorder, is proving that the common practice of recycling diseased animals back into the food chain is utter madness. Lyman is a rancher and feedlot operator in Montana, and directs the Eating with a Conscience campaign of the Human Society of the United States. (v7,#4)

Lynas, M, "Red Dust Rising", Ecologist 34 (no.1, 2004): 44-54. If you want to be convinced that global warming is happening, you need to visit China.

Lynch, Barbara Deutsch, "The Garden and the Sea: U.S. Latino Environmental Discourses and Mainstream Environmentalism," Social Problems 40(1993):108-24. Latinos see nature quite differently from mainstream environmentalists. Latino environmentalism, in which the garden metaphor is central, rejects the dichotomization of people and nature that has pervaded contemporary environmentalism. "The environment is a social construction: a product of all cultural responses to specific historical circumstances which give rise to shared sets of imagined landscapes" (p. 109). (v7,#1)


Lynch, MJ; Stretesky, PB; Burns, RG, "Determinants of Environmental Law Violation Fines Against Petroleum Refineries: Race, Ethnicity, Income, and Aggregation Effects", Society and Natural Resources 17 (no.4, 2004): 343-357(15).

Lynch, Tony, Wells, David, "Non-Anthropocentrism? A Killing Objection," Environmental Values 7(1998): 151-163. To take the idea of a non-anthropocentric ethic of nature seriously is to abandon morality itself. The idea of humanity is not an optional extra for moral seriousness. Non-anthropocentric environmental ethicists mistake the kind of value non-human entities may bear. It is not moral value, but aesthetic value. KEYWORDS:non-anthropocentrism, humanity, killing, aesthetic value. Tony Lynch is at University of New England, NSW. David Wells is at University of New England, NSW. (EV)

Lynch, Tony, "Deep Ecology as an Aesthetic Movement," Environmental Values 5(1996):147-60. Many deep ecologists call for a new ecological ethic. If this ethic is meant to be a moral ethic, then deep ecology fails. However if deep ecology is interpreted as an aesthetic movement, then it is both philosophically coherent and practically adequate. KEYWORDS: Deep ecology, morality, aesthetics, nonanthropocentrism. (EV)

Lyon, Thomas P., and John W. Maxwell, Corporate Environmentalism and Public Policy. Cambridge, UK: Cambridge University Press. Corporate environmentalism is the result of firms attempting to anticipate public policy changes and to influence the legislative process in their best interests.

Lyons, Jonathan, "Smuggled Orangutans: the Bangkok Six," The Animals' Agenda 15 no. 2 (March 1995): 22-. Torn from their mothers and sold to smugglers, six infant orangutans were discovered, nearly dead, in packing crates at the Bangkok airport. Two of the smugglers were apprehended and a Mexican zoo official mistook a U.S. Fish and Wildlife agent in a gorilla suit for the real deal. (v6,#2)


Lyons, Graham, Evonne Moore and Joseph Wayne Smith, Is the End Nigh? Internationalism, Global Chaos and the Destruction of the Earth. Aldershot, Hampshire, UK: Avebury. Brookfield, VT: Ashgate Publishing Co., 1995. 283 pages. $ 69.00. A critique of ideologies that dominate the power centers of the industrialized world and are accelerating the destruction of natural capital and the environment. The authors are at the University of Adelaide, Australia. (v7,#2)


Mac    All Mac's should also be searched under Mc. The computer slavishly alphabetizes them.


MacCleery, Douglas W., *American Forests: A History of Resiliency and Recovery*. Durham, NC: Forest History Society, 1994 (and earlier editions). Following two centuries of decline, the area of forest land has stabilized. Today the U.S. has about the same forest areas as in 1920. The area consumed by wildfire each year has fallen 90 percent. Populations of deer, turkey, elk, pronghorns, and many other wildlife have increased dramatically. Eastern forests have staged a major comeback. Forest growth nationally has exceeded harvest since the 1940's. Recreational use of forests has increased manyfold. Dependence of the economy on wood and wood products is as great as ever. One can wonder, however, whether questions about the quality of the forests (pine plantations vs. old growth forests) still need to be addressed. MacCleery is a professional forester with the U.S. Forest service. (v6,#4)

MacCracken, Michael C., "Climate Change Discussions in Washington: A Matter of Contending Perspectives," *Environmental Values* 15(2006): 381-395. The scientific evidence and understanding underpinning societal responsibility for the accelerating pace of climate change has become increasingly strong over the past hundred years. Although many nations have begun to take actions that have the potential to eventually slow the pace of change, contention over the issue continues in the United States, particularly in the nation's capital. A major cause appears to arise from different interpretations of the evidence arising from different perspectives on the issue, including those of the scientific, environmental, fossil-fuel generating, technological, economic and ethical communities. In addition, the public encounters a cacophony of intermixed perspectives from the media and elected officials. While each perspective provides some useful insights, each alone contributes to inhibiting development of the national political consensus needed to responsibly address climate change. Without leadership that balances and reconciles competing perspectives, it is unlikely that a sufficient limiting of emissions will be enacted to prevent significant changes in climate that will impose increasing challenges for those in both developing and developed nations. (EV)


MacDonald, Doug. "Beer Cans, Gas Guzzlers and Green Taxes: How Using Tax Instead of Law May Affect Environmental Policy." Alternatives 22(Jul. 1996):12. Why was the Ontario government willing to impose a green tax on beer cans, but not on gasoline?


MacDonald, Mia, "Toward Kinship `From Protest To Policy.'" The Animals' Agenda 16(Mar.1996):40. When will animal activists be able to retire the lobster and carrot costumes to the closet and start wielding real policy-making power instead? Author Mia MacDonald suggests strategies for advancing meaningful change in the political arena, while still "keeping the placards aloft and the lobster suits nearby."

MacDonald, Mia. "AHIMSA With Attitude: An Interview With Maneka Gandhi." The Animals' Agenda 16, no.1 (1996): 30. Maneka Gandhi, a member of a famous family, describes what it's like to be an animal rights advocate and environmentalist in India. "I became the Minister for Environment and found the word 'environment' was misspelled on the Ministry's letterhead!". (v7, #3)

MacDonnell, Lawrence J. and Sara F. Bates, eds., Natural Resources Policy and Law: Trends and Directions. Washington: Island Press, 1993. $ 19.95 paper. $ 38.00 hardcover. Ten chapters, by, in addition to the editors, Clyde O. Martz, George Cameron Coggins, Richard C. Maxwell, A. Dan Tarlock, Joseph Sax, Charles F. Wilkinson, David Getches, and Richard J. Lazarus. With a special emphasis on new laws and important legal cases of the past decade. Contributions include: historical overview, public land law, mineral law, oil and gas law, water resources, public trust doctrine, environmental law, shifting paradigms. In recent years, the contributors variously argue, we have begun to appreciate the inherent worth of our land, air, water, a worth that is entirely unrelated to economic growth and development. The evolution of law and policy regarding natural resource and environmental issues over the past century reflects these ongoing changes in valuation. MacDonnell and Bates are at the Natural Resources Law Center, University of Colorado School of Law. (v.10,#1)

MacDonnell, Lawrence J., From Reclamation to Sustainability: Water, Agriculture, and the Environment in the American West. Niwot,CO: University Press of Colorado, 1999. The American West viewed through the lens of its most contested resource: water. Western water resources have been developed beyond their sustainable capacity, resulting in overdevelopment, declining rural communities, dewatered streams incapable of supporting native species, and degraded water quality. Sustainable use of water depends on reducing the gap between diverted water and used water, restoring the functional integrity of water sources. MacDonnell is a water lawyer, and was the first director of the Natural Resources Law Center at the University of Colorado School of Law, Boulder. (v.10,#1)

MacDougall, A. Kent. "Humans as Cancer", Wild Earth 6(no.3, 1996):81-88. "A cancerous tumor continues to grow even as its expropriation of nutrients and disruption of vital functions causes its host to waste away. Similarly, human societies undermine their own long-term viability by depleting and fouling the environment. With civilization as with cancer, initial success begets self defeating-excess." Various interpreters argue over whether this is metaphor or more literal, and many find the idea offensive. Lovelock, with his Gaia hypothesis, initially found the idea absurd, but has changed his mind. Various physicians and epidemiologists have supported the idea. "Whether as metaphor or hypothesis, the proposition that humans have been acting like malignant cancer cells deserves to be taken seriously." MacDougall is an award-winning professor emeritus of journalism at the University of California. (v7,#4)

Mace, William M., "James J. Gibson’s Ecological Approach: Perceiving What Exists," Ethics and the Environment 10(2005):195-216. The purpose of this paper is to help an audience attracted to environmental philosophy get to the core of Gibson's system in a compact form and to appreciate the necessity for an account of the environment in epistemology. I hope to show that Gibson’s is a consistent and scientifically progressive account of knowing that gives the environment its due and that this is not a simple matter of fiat but a call to extended scientific investigation. I stress that Gibson's work is scientifically progressive in the sense that it has consistently opened new avenues for research. If one could be assured tomorrow that Gibson was correct and his critics wrong, the ecological psychology enterprise would not have to be shut down with nothing left to do. The goal of the enterprise, certainly for Gibson, was not to be declared a winner but to open doors for discovery. Because Gibson has developed a theory of perceiving the environment, it would be worth exploring as an important topic for environmental philosophers covering a wide range of issues. It offers an intriguing, environmentally based, grounding for epistemology. Mace is in psychology, Trinity College, Hartford, CT, and founding director of the International Society for Ecological Psychology (ISEP). (Eth&Env)


MacEachern, Dianne. Save Our Planet: 750 Everyday Ways You Can Help Clean Up the Earth, Dell, New York, 1990. $ 9.95. (v1,#2)

Macer, Darryl R.J., Bhardwaj, Minakshi, Maekawa, Fumi, and Niimura, Yuki, "Ethical opportunities in global agriculture, fisheries, and forestry: The role for FAO," Journal of Agricultural and Environmental Ethics 16(2003):479-504. FAO (Food and Agriculture Organization) has a unique and essential role in addressing the ethical problems facing humanity and in making these problems into opportunities for practical resolution. A broad range of ethical issues in agriculture, fisheries, and forestry were identified by analysis of the literature and by interviews with FAO staff. Issues include sharing access to and preserving natural resources, introduction of new technology, conservatism over the use of genetic engineering, ethics in animal agriculture, access to information, food security, sustainable rural development, ensuring participation of all people in decision making and in receiving benefits of agriculture, reducing corruption, and involvement of private and public sectors in decision making. Rather than viewing these issues as problems, they should be viewed as opportunities for debate, learning about others' views, and resolution. The United Nations has an important role to play in how decisions are made in the global ethical debate in food and agriculture. KEY WORDS: agriculture FAO, biotechnology, environment, ethics, fisheries, United Nations. (JAEE)

Macer, Darryl, "Uncertainties About 'Painless' Animals", Bioethics, 3 (1989): 226-35. Genetic techniques are being increasingly employed to alter animals used in both medical and agricultural research, and will no doubt be extended into many applications. This paper seeks to examine whether it is possible to genetically manipulate animals so that they have an altered capacity to feel pain; whether it would be ethical to do so; and how we would regard animals that do not feel pain. The creation of "painless" animals in order to make a new class of means for human ends may alter the way we argue about the use of animals. Instead of animals possessing some sort of integrity, they can be made the longterm property of humans, not only in commercial terms, or when or how they come into existence, but in whether they are sentient animals of a new class of "painless" animals. Some would argue that this new class would possess the
moral status of plants, however, many would share the author’s view that this would be an unethical use of our power over nature. The difficulty is to say precisely why it is unethical.

Macer, Darryl R. J., *Bioethics Is Love of Life: An Alternative Textbook*. Christchurch, New Zealand: Eubios Ethics Institute, 1998. 160 pages. ISBN 0-908897-13-8. Bioethics interpreted as the love of life. "Love of life" is the simplest and most all encompassing definition of bioethics, and it is universal among all peoples of the world (p. 1). Chapter 7 is "Love of Nature and Environmental Ethics." Environmental ethics as love of life, biophilia, loving especially the integrity of life, organismic and holist. An alternative view published in a location that might not otherwise come to your attention. Macer is a New Zealander who has spent many years teaching at the University of Tsukuba, Tsukuba, Japan, and has also been instrumental in promoting bioethics in India. A website for the Eubios Ethics Institute is: http://www.biol.tsukuba.ac.jp/~macer/index.html

Macer, Darryl, "Animal Consciousness and Ethics in Asia and the Pacific," *Journal of Agricultural and Environmental Ethics* 10(1997/1998):249-267. ABSTRACT. The interactions between humans, animals and the environment have shaped human values and ethics, not only the genes that we are made of. The animal rights movement challenges human beings to reconsider interactions between humans and other animals, and may be connected to the environmental movement that begs us to recognize the fact that there are symbiotic relationships between humans and all other organisms. The first part of this paper looks at types of bioethics, the implications of autonomy and the value of being alive. Then the level of consciousness of these relationships are explored in survey results from Asia and the Pacific, especially in the 1993 International Bioethics Survey conducted in Australia, Hong Kong, India, Israel, Japan, New Zealand, The Philippines, Russia, Singapore and Thailand. Very few mentioned animal consciousness in the survey, but there were more biocentric comments in Australia and Japan; and more comments with the idea of harmony including humans in Thailand. Comparisons between questions and surveys will also be made, in an attempt to describe what people imagine animal consciousness to be, and whether this relates to human ethics of the relationships. KEY WORDS: Animals, Asia, consciousness, Australia, Hong Kong, India, Israel, Japan, New Zealand, The Philippines, Russia, Singapore, Thailand. (JAEE)


MacGregor, Sherilyn, "From Care to Citizenship: Calling Ecofeminism Back to Politics," *Ethics and the Environment* 9(no. 1, 2004):56-84. Although there are important aspects of ecofeminist valuations of women’s caring, a greater degree of skepticism than is now found in ecofeminist scholarship is in order. In this article I argue that there are political risks in celebrating women’s association with caring, as both an ethic and a practice, and in reducing women’s ethico-political life to care. I support this position by drawing on the work of feminist theorists who argue that the positive identification of women with caring ought to be treated cautiously for it obscures some of the negative implications of feminized care and narrows our understanding of women as political actors. I explain why I think ecofeminists would be better served by using feminist theories of citizenship to understand and interpret women’s’ engagement in politics. MacGregor is in the Institute for Environment, Philosophy, and Public Policy at Lancaster University, UK. (E&E)

Machan, Tibor R., "Do Animals Have Rights?" Public Affairs Quarterly 5(April 1991): 163-173. "Animals have no rights and need no liberation. .... To think that they do is a category mistake." "Rights and liberty are political concepts applicable to human beings because human beings are moral agents." "There is a scale of importance in nature, and among all the various kinds of being, human beings are the most important...". "With human nature a problem arose in nature that had not been there before--basic choices had to be confronted, which other animals do not have to confront. The question, 'How should I live?' faces each human being. ... For this reason we are very different from other animals--we also do terrible, horrible, awful things to each other as well as to nature, but we can also do much, much better and achieve incredible feats nothing else in nature can come close to." "There is plainly no valid intellectual place for rights in the non-human world, the world in which moral responsibility is for all practical purposes absent." "Animals are not the sort of beings with basic rights to life, liberty and property, whereas human beings, in the main, are just such beings. Yet we know that animals can feel pain and can enjoy themselves and this must give us pause when we consider using them for our legitimate purposes. We ought to be humane, we ought to kill them and rear them and train them and hunt them in a fashion consistent with such care about them as sentient beings." Machan is in the Department of Philosophy at Auburn University. (v2,#2)

Machan, Tibor R., Putting Humans First: Why We Are Nature's Favorite. Lanham, MD: Rowman and Littlefield, 2004. The primacy of human life in the natural world and the corresponding justice of humans making use of animals. Disputes the concept of "animal rights" and "animal liberation." Humans are very much a part of nature though not, ordinarily, of the wild. Given their nature, human beings not only can, but ought to use nature to serve their needs. Machan is emeritus in philosophy, Auburn University, and currently teaching at Chapman University.


Macheta, Aleksandra, Environment and Development: Our Common Future, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)


MacIntyre, Alasdair, Dependent Rational Animals. Chicago: Open Court, 2000. Dependency and vulnerability are the keys unlocking the secrets of human morality. All humans are dependent throughout life, from infancy to age. A community's care for its dependents is a fundamental measure of its moral statue. Other animals experience extended dependence, such as dolphins and gorillas, and they too exhibit the elementary moral characteristics of cooperation, mutual protection and care for the disabled. Becoming morally mature is a matter of becoming an "independent practical reasoner," (rather than a matter of psychological health, self-actualizing, identity, etc.). In mature morality we learn how to reflect both on our needs and the communal practices that meet our dependencies. We learn how to evaluate these needs, something the higher animals never master, and to adjust them in terms of the needs of others. The virtues--
such as "just generosity"--are important because they sustain independent practical reasoning. (v.11,#3)


MacKenzie, Michael, "A Note on Motivation and Future Generations," Environmental Ethics 7(1985):63-69. A short essay, quite different from most work in this field. MacKenzie examines a specific technological achievement: hydraulic agriculture in China. This is a project that requires technological cooperation across generations; maintenance of the system does not help the present population, only future generations. (Katz, Bibl # 1)

MacKenzie, Susan Hill. Integrated Resource Planning and Management. Covelo, CA: Island Press, 1996. 240pp. $47 cloth, $24.95 paper. Three indepth case studies are used to explore the institutional prerequisites to the creation and implementation of ecosystem-based management plans in the context of Great Lakes water resources. (v7,#4)

Mackey, Brendan G., "Environmental Scientists, Advocacy, And The Future Of Earth," Environmental Conservation 26 (No. 4, Dec 01 1999): 245-. (v.11,#2)

Mackinnon, John, with Photographs by Nigel Hicks. Wild China. Cambridge, MA: The MIT Press, 1996. 208 pp. $40. Wild China surveys the rich biological treasures of this country. It explores reserves where the Giant Panda is not protected, alpine meadows that are a botanist's wonderland of floral species, wetlands that are home to a million birds, turtle islands, and tigers' stalking grounds. Produced in association with the World Wide Fund for Nature (v8,#1)


MacKinnon, Mary Heather and Moni McIntyre, eds. *Readings in Ecology and Feminist Theology*. Kansas City, MO: Sheed and Ward, 1994. 360 pages. $19.95. This anthology features key essays which have helped shape the current understanding of the essential relationship between ecology and theology. Selections offer a variety of voices which link the growing insights and concerns of ecology, science, feminism, and theology. Contributors include John Cobb, Ray Griffin, Sallie McFague, and Anne Clifford. (v6,#1)


Maclean, Norman, *Young Men and Fire*. Chicago: University of Chicago Press, 1992. 288 pages. $19.95. On August 5, 1949 a crew of fifteen of US Forest Service elite airborne firefighters jumped into a remote fire in Montana. All but three were killed. This is their story, and its aftermath. For another Maclean story about Montana, see *A River Runs Through It*, in the media section. (v3,#4)

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. (v5,#4)

MacLeod, Alexander. "Rural Britons Defend Fox Hunt, 'Way of Life.'" *The Christian Science Monitor* 89 (14 July 1997): 6. In a rally in London, 100 thousand country folk protested proposed laws against fox hunting, claiming that city dwellers know next to nothing about rural life. (v8,#2)


MacMillan, Douglas C., "An Economic Case For Land Reform," *Land Use Policy* 17 (No. 1, Jan 01 2000): 49-. (v.11,#2)

MacMillan, Gordon. *At the End of the Rainbow?: Gold, Land, and People in the Brazilian Amazon*. New York: Columbia University Press, 1996. 199 pp. $22 paper, $45 cloth. A vivid account of the violent clash between forty thousand miners and the Yanamami Indians in the state of Roraima, as well as arguments that explore the perspectives of the farmers, ranchers, natives and others involved in this historic moment. (v7,#4)


Macnaghten, Phil and Urry, John, *Contested Natures*. London and Thousand Oaks, CA: Sage Publications, 1998. $ 26.50 paper. $ 82.00 cloth. There is no singular "nature" out there that is the fountainhead of pure and positive values waiting to be saved. Rather, there are multiple "natures." Nature is constantly changing its significance in daily life. Nature is irredicibly contested and embedded in highly diverse and ambivalent social practices. All notions of nature are bound up with different forms of social life from which they cannot be disentangled. The
apparently natural world has been produced in many ways within particular social practices. Different times, different senses, produce different and distinct spaces, from the local to the global. The authors are at Lancaster University, UK. (v.9,#3)

Macnaghten, Phil and Urry, John, Contested Natures. London: Sage, 1998. "In this book we seek to show that there is no singular `nature' as such, only a diversity of contested natures; and that each such nature is constituted through a variety of socio-cultural processes from which such natures cannot be plausibly separated. We therefore argue against three doctrines which are widespread in current thinking about nature and the environment. ...

The first, and most important for our subsequent argument, is the claim that the environment is essentially a `real entity', which, in and of itself and substantially separate from social practices and human experience, has the power to produce unambiguous, observable and rectifiable outcomes. This doctrine will be termed that of `environmental realism', one aspect of which is the way that the very notion of nature has been turned into a scientifically researchable environment. ...

The second doctrine is that of `environmental idealism'. ... This doctrine holds that the way to analyze nature and the environment is through identifying, critiquing and realising various `values' which underpin or relate to the character, sense and quality of nature. ...

The third doctrine specifically concerns the responses of individuals and groups to nature and the environment. It is concerned to explain appropriate human motivation to engage in environmentally sustainable practices and hence the resulting environmental goods or bads. ... This doctrine we will term `environmental instrumentalism' and is importantly linked to a marketed naturalistic model of human behavior, and its radical separation from non-human species" (pp. 1-1). "The `social' dimensions of nature have been significantly under-examined" (p. 4).

Macnaghten is at the Centre for the Study of Environmental Change, Urry in sociology at Lancaster University, Lancaster, UK. (v.13,#1)

Macnaghten, Phil, and John Urry, Contested Natures. London: Sage Publications, 1998. Attitudes toward nature since the 17th century. There are two broad patterns: (1) the Enlightenment view, which is "nature-sceptical," with nature to be mastered, and (2) the Romantic view, which is "nature-affirming."

MacNally, R. C., Ecological Versatility and Community Ecology. New York: Cambridge University Press, 1995. 435 pages. $ 69.95. A theory of specialist versus generalist species, the generalists having more versatility in using resources available in various ecosystems. This gives insight into community ecology and offers a conceptual framework for doing research on species of special concern. (v8,#1)


MacPhee, Ross D. W., ed., Extinctions in Near Time: Causes, Contexts, and Consequences. New York: Kluwer Academic/Plenum Publishers, 1999. Extinctions during the time Homo sapiens has been on Earth, the last 100,000 years or so. There have been many losses when people began to expand across areas that had never before experienced their presence. Human effects have been especially disruptive on islands, and the contributors think the human presence on continents has often been almost as bad, although climate change complicates the evidence, and fewer animals disappear where humans had longer been, Europe and Africa. Debate continues and many issues are unresolved. In the last 500 years, three-quarters of all mammal extinctions occur on islands, and most of the remainder occur in Australia. Most of the
recent mammal extinctions are small mammals, in contrast with the Pleistocene extinctions, where most were large (though this may reflect bias in fossil preservation). (v.13,#1)

MacRae, R.J., Henning, J., and Hill, S.B., "Strategies to Overcome Barriers to the Development of Sustainable Agriculture in Canada: The Role of Agribusiness", Journal of Agricultural and Environmental Ethics 6(1993):21-52. Strategies to involve agribusiness in the development of sustainable agricultural systems have been limited by the lack of a comprehensive conceptual framework for identifying the most critical supportive policies, programs and regulations. In this paper, we propose an efficiency/substitution/redesign framework to categorize strategies for modifying agribusiness practices. This framework is then used to identify a diverse range of short, medium, and long-term strategies to be pursued by governments, community groups, academics and agribusiness to support the transition. Strategies discussed include corporate greening, ethical investment, changing the legal status of the corporation, new business forms and the development of ecological economics. MacRae, Henning, and Hill are at Macdonald College of McGill University, Quebec.


Maddock, Ant H., and Samways, Michael J., "Planning for biodiversity conservation based on the knowledge of biologists," Biology and Conservation 9(2000):1153-1169. Maddock is with the KwaZulu-Natal Nature Conservation Service, Pietermaritzburg, KwaZulu-Natal, South Africa. Abstract. To conserve biodiversity, complementary approaches are necessary. Besides using museum data from sightings and specimens, the knowledge of experts can also be employed. Often such valuable information is lost on retirement or death. To investigate the value of this knowledge for nature conservation planning, we sent questionnaires to 124 professional conservationists in the province of KwaZulu-Natal, South Africa. Fifty-two replies illustrated that the historical context biases our concepts of nature and the conservation of biodiversity. Despite an awareness of all the spatial scales, complexities and dynamics of nature, there is still a strong focus on large-sized animals and visibly discrete ecosystems, such as wetlands. Nevertheless, the respondents illustrated that an awareness of infrequently seen and less well known organisms is increasing. Harnessing this expert knowledge was valuable for conservation planning, but had the weakness that many taxa and localities were neglected. Similar problems arose with data from museum specimens. However, both these approaches were synergistic and

Maddock, Ant H. and Michael J. Samways. "Planning for Biodiversity Conservation Based on the Knowledge of Biologists," Biodiversity and Conservation 9(no. 8, 2000):1153-1169. Abstract. To conserve biodiversity, complementary approaches are necessary. Besides using museum data from sightings and specimens, the knowledge of experts can also be employed. Often such valuable information is lost on retirement or death. To investigate the value of this knowledge for nature conservation planning, we sent questionnaires to 124 professional conservationists in the province of KwaZulu-Natal, South Africa. Fifty-two replies illustrated that the historical context biases our concepts of nature and the conservation of biodiversity. Despite an awareness of all the spatial scales, complexities and dynamics of nature, there is still a strong focus on large-sized animals and visibly discrete ecosystems, such as wetlands. Nevertheless, the respondents illustrated that an awareness of infrequently-seen and less well known organisms is increasing. Harnessing this expert knowledge was valuable for conservation planning, but had the weakness that many taxa and localities were neglected. Similar problems arose with data from museum specimens. However, both these approaches were synergistic and
highlighted the geographical areas that need far more exploration of their biodiversity. Such information gathering is an important ethical and practical exercise for conserving biodiversity. Key words: biodiversity, concepts, conservation, nature, planning, questionnaire survey.


Madigan, Nick, "Enlisting Law Schools in Campaign for Animals," *New York Times*, November 27, 2004, p. A1, A 23. Bob Barker, long-time host of "The Price Is Right," has given a million dollars to each of several law schools to set up law education in animal welfare legislation, including those at Stanford, Columbia, Duke, the University of California, Los Angeles, and Harvard. An additional concern is having pet animals spayed. (v.14, #4)

Madigan, Nick, "Hearst Land Settlement Leaves Bitter Feelings: Deal Will Limit Public Access to Coast," *New York Times*, September 20, 2004, page A13. A complex conservation deal in coastal California, San Luis Opispo County, involves State of California purchase of much of the giant holdings of the Hearst Corporation, largely undeveloped and owned by descendants of the publishing magnate William Randolph Hearst. The dispute has involved finding a middle ground between the interest of the public, which is entitled by law to access to the beach, and that of the Hearst Corporation which controls vast tracts of land from which it has the right to profit. Opponents of the deal say the State is too generous to the Hearst Corporation, which has retained the most dramatic parts of the coastline and plans to develop luxury homes on 320 acre parcels and a large hotel, "the most exclusive subdivision on the West Coast." Public use of the beaches is limited to 100 persons a day during daylight hours in one of the two most scenic areas and to 20 people at a time once a month in the other. (v.14, #4)


Madsen, Kathrine Hauge, Holm, Preben Bach, Lassen, Jesper and Sandøe, Peter, "Ranking Genetically Modified Plants According to Familiarity," *Journal of Agricultural and Environmental Ethics* 15(no. 3, 2002):267-278. In public debate GMPs are often referred to as being unnatural or a violation of nature. Some people have serious moral concerns about departures from what is natural. Others are concerned about potential risks to the environment arising from the combination of hereditary material moving across natural boundaries and the limits of scientific foresight of long-term consequences. To address some of these concerns we propose that an additional element in risk assessment based on the concept of familiarity should be introduced. The objective is to facilitate transparency about uncertainties inherent in the risk assessment of the GMP. Familiarity conventionally involves data and experience relating to the plant species and the ecosystem in question. We would like to extend this concept to the molecular level of plant breeding and suggest that GMP characteristics should be compared to a reference baseline determined by conventional breeding techniques. Three GMPs are ranked according to familiarity at the plant and ecosystem level and the molecular level. The approach may help to integrate discussion of the scientific arguments and moral questions raised in the debate about GMOs by providing an operational scheme within which moral concerns are brought within the framework of science-based risk assessment. KEY WORDS: bioethics, familiarity, regulation, risk assessment, unnatural. Madsen, Lassen, and Sandøe are with the Centre for Bioethics and Risk Assessment, The Royal Veterinary and Agricultural University, Frederiksberg, Denmark. Holm is with the Danish Institute of Agricultural Sciences, Research Centre, Flakkebjerg, Denmark. (JAEE)


Maestas, Jeremy D., Knight, Richard L., and Gilgert, Wendell C., "Biodiversity across a Rural Land-Use Gradient," Conservation Biology 17 (No. 5, October 2003):1425-1434. Biodiversity compared in ex-urbia, ranchlands, and nature reserves. Some bird species that adjust well to humans (with bird feeders or garbage piles) may be increased in numbers in ex-urbia, but most are not. Wildlife are on ranchlands and reserves, but, surprisingly, there may be fewer invasive exotics on ranchlands than on nature reserves--possibly because nature reserves have trails with lots of people on them, who bring in the seeds. In the face of expanding ex-urbia and limited nature reserves, the authors conclude that attention to biodiversity conservation on ranchlands is quite vital. Maestas is with the U.S. Natural Resources Conservation Service, Provo, Utah. (v.14, #4)


Maggitti, Phil. "Is Fur Really Dead?" The Animals' Agenda 15(no.6 Nov.1995):24. Furriers by the dozens lose their shirts. Models take off their shirts and more to demonstrate that the only skin you should wear is your own. Is this the beginning of the end for fur, or the middle of a long, cold war? Maggitti has some interesting answers. (v7,#1)

Maggitti, Phil. "The Stray Cat: Whose Life Is It, Anyway?" The Animals' Agenda 14 (no. 6, 1994): 22-. They're everywhere! They're everywhere! It's raining cats and cats. And no one seems to know for sure what to do about the situation--except to attack everyone else's solutions. A report on the state of the (dis)union among feral cat advocates. (v6,#1)

Magnuson, Jon, "Great Lakes, Troubled Waters," Christian Century 116(no. 25, Sept. 22-29, 1999):902-905. The Great Lakes basin, populated by over 40 million people, is at the center of a collision of economic interests and environmental politics. Authorities are reluctantly acknowledging that the lakes have been polluted by economic interests, to the point of jeopardizing human health. "It's not the water of the Great Lakes we finally have to worry about. It is ourselves." Magnuson, a Lutheran pastor, is a member of the Lake Superior Binational Forum, of the International Joint Commission of Canada and the United States. (v.10,#3)

Magnuson, Jon, "Reflections of an Oregon Bow Hunter," Christian Century, March 13, 1991. The Lutheran campus pastor at the University of Washington in Seattle goes bow hunting for elk with one of the Pacific Northwest's most respected trophy bow hunters, also a churchman. Magnuson fears that "as populations become increasingly urbanized and technologically sterile, natural cycles of decay, death and rebirth become dangerously romanticized and more remote from realities of daily life." He worries that antihunting protests have "triggered more guilt than I'd like to admit." His guide urges "the need to recognize the natural world for its own values and laws. He is a committed bow hunter because it draws him into a relationship and harmony with the natural world. You have to learn to respect the animal you hunt." After three days of immersion in the Oregon wilds, Magnuson gets a short. "I am poised with the decision whether or not to loose the arrow. A prayer now on my lips. My fingers release" "to identify myself with an ancient primordial ritual, the spilling of blood." (v2,#1)


Magoc, Chris J., Yellowstone: The Creation and Selling of an American Landscape, 1870-1903. Albuquerque: University of New Mexico Press, 1999. Paper, $ 20. The American myths and late-Victorian values behind the movement both to preserve the Yellowstone wilderness and to extract its natural resources, codifying the ultimate American landscape. (v10,#4)

Magretta, Joan, "Growth Through Global Sustainability: An Interview with Monsanto’s CEO, Robert B. Shapiro," Harvard Business Review 75(no. 1, Jan./Feb. 1997):79-88. Shapiro claims: The need for environmentally sustainable products will soon create a major strategic discontinuity for the world's enterprises. Recognition of this discontinuity is transforming Monsanto's thinking about growth. Although a closed system like the earth cannot support an unlimited increase of material things, it can withstand exponential growth of information. Hence two design principles have been incorporated into new product development at Monsanto: substituting information for "stuff" and replacing products with services. (v8,#1)

Maguire, Daniel C. and Rasmussen, Larry L., Ethics for a Small Planet. Albany, NY: SUNY Press, 1998. The crisis caused by the combined impact of overpopulation, overconsumption, and economic and political injustice. The authors wish to bring religious scholarship into dialogue with the world's policymakers. The world's religions will be important players in the crises relating to population and the threat of ecocide. Maguire indictes our male-dominated religions for the problems they have caused for our ecology and reproductive ethics. Rasmussen claims that Europeans packaged a form of earth-unfriendly capitalism and shipped it all over the world with missionary zeal. Maguire teaches social ethics at Marquette University. Rasmussen teaches social ethics at Union Theological Seminary, New York. (v9,#1)


Mahiman, J. D., "Uncertainties in Projections of Human-Caused Climate Warming," Science 278 (21 November, 1997):1416-1417. Good summary, with as many certainties as uncertainties. Mahiman distinguishes virtually certain facts ("atmospheric abundances of greenhouse gases are increasing because of human activities"), virtually certain projections, 99 percent ("The stratosphere will continue to cool significantly as CO$_2$ increases"), very probable projections, 90 percent ("A doubling of atmospheric CO$_2$ over preindustrial levels is projected to lead to an equilibrium global warming in the range of 1.5$^\circ$ to 4.5$^\circ$C"). Also incorrect projections ("the number of tropical storms, hurricanes, and typhoons per year will increase"). The author is at the National Oceanic and Atmospheric Administration Lab at Princeton University. (v.8,#4)


Mahoney, Timothy, Platonic Ecology: A Response to Plumwood's Critique of Plato," Ethics and the Environment 2(1997):25-41. This is a response to Val Plumwood's critique of Plato and an overview of the way in which Plato provides a viable environmental vision. This vision sees the realm of nature as rooted in the realm of logos, and human beings as sojourners who are nonetheless integral parts of nature whose vocation is to act as mediators between the realms thereby bringing nature into even greater participation in logos. To fulfill the human vocation one must come to an awareness of the logos by purging oneself of the sham values which permeate society and distort one's understanding of reality. Mahoney is in philosophy at the University of Texas at Arlington. (E&E)

Mahoney, Denis, "Towards a Better Press for Animals," Animal Issues (University of Sydney, Australia) 2, no. 1, 1998. (v.10,#1)


Mainka, Sue and Trivedi, Mander, eds., Links between Biodiversity Conservation, Livelihoods and Food Security: The Sustainable Use of Wild Species for Meat. Covelo, CA: Island Press, 2002. The global use of wild animals for meat is now the primary illegal activity in many protected areas, and growing human populations and a lack of livelihood options suggest that demand for wild meat is likely to continue to rise. Are there ways of sustaining the use of wild meat?

World Bank has sought to be an active partner in implementing the Rio imperatives. The Bank has a growing loan portfolio of environmental projects, now $10 billion for 137 projects in 62 countries. Obtainable from: The World Bank, 1818 H Street, N.W., Washington, DC 20433. E-mail: boons@worldbank.org


Malakoff, David, "Plan to Import Exotic Beetle Drives Some Scientists Wild," Science 284(12 May 1999):1255. Endangered species living in exotic pest. Saltcedar (Tamarix) was introduced extensively in the last century as a windbreak and to control erosion in the U.S. Western states, and has proved an ecological disaster, covering 500,000 hectares in 15 states, and crowding out native vegetation in riparian areas. A plan to use an introduced Chinese leaf beetle to control it seems promising; but, alas, the endangered willow flycatcher has learned to nest in the saltcedar. The plan has been put on hold, and subject to more extensive (and more carefully controlled) testing. (v10,#4)


Malakoff, David, and Stone, Richard, "Scientists Recommend Ban on North Sea Cod," Science 298(1 November 2002):939. Cod stocks in the northeast Atlantic are at historic lows, and a panel of scientists says that populations will collapse if there are not drastic reductions in fishing. But this could cost 20,000 jobs in the United Kingdom alone. It looks like it is doomsday either for the cod or for the cod fishermen. (v.13,#4)

Malakoff, David, "Congress Clears Way for Rodent Rules," Science 294(23 November 2001):1637. Animal welfare of rodents. For thirty years, the United States Department of Agriculture (USDA) has exempted mice, rats, and birds from the Animal Welfare Act. But these account for 95% of all experimental animals. The U.S. Congress has approved the start of developing rules for the use of rodents, previously blocked by biomedical research groups. The USDA has been persistently sued by animal rights groups and had agreed to draft caging and care rules. But biomedical groups had blocked this until now. Depending on how fast the USDA moves, the matter could soon be back in court. (v.13,#1)

Malakoff, David, "Plan to Import Exotic Beetle Drives Some Scientists Wild," Science 284(1999):1255. Endangered flycatcher, exotic beetle, and invasive tamarisk. Tamarisk, or saltcedar, was introduced years ago as a windbreak and to control erosion in the U.S. West and has proved a disastrous invasive, displacing riverine native plants in fifteen states. Tamarisk flourishes in the highly modified rivers that agriculture, damming, irrigation, and overgrazing in the West has created. Plans to import an exotic beetle that feeds on the tamarisk, however, have been limited because, meanwhile, the endangered willow flycatcher, deprived of its original nesting habitat, has learned to nest in the tamarisk. But the U.S. Fish and Wildlife Service, charged with both uprooting the tamarisk and preserving the flycatcher, is making limited trials of beetle introductions. (v.10,#2)

U.S. Department of Agriculture agreed to a lawsuit settlement challenging the 30-year old ruling that mice, rats, and birds are not laboratory "animals," under the Animal Welfare Act. This exempted 95% of all experimental animals from the federal government's legal definition of "animal." Animal welfare advocates have long challenged the ruling. In 1992 a federal judge ruled that the USDA's justification for the exemption--that Congress never intended the law to apply to the three kinds of animals-- was "strained and unlikely." In September 2000, the USDA agreed to include these animals and "initiate and complete a rulemaking on the regulation of birds, rats, and mice within a reasonable time."

Biomedical research groups protested vigorously, though their protests were disregarded by the USDA and the courts. But through the request of the University of Mississippi Medical Center in Jackson to Congressman Thad Cochran (R-MS), on a rider attached to the agriculture appropriations bill, Congress voted that mice, rats, and birds will not be animals in fiscal year 2001. A recent editorial in Nature complained, "Some of the research lobby's arguments verge on the reactionary." Although currently voluntary, many research laboratory animals have included these animals in animal welfare concerns for decades. Others claim it will drive up costs unacceptably. (v.11,#4)

Malakoff, David, "Arizona Ecologist Puts Stamp on Forest Restoration Debate," Science 297(27 September 2002):2194-2196. Wally Covington, forest ecologist at Northern Arizona State University, wants to return ponderosa pine forests to their "presettlement" state, but argues that managed burning is not enough; present forests, laden with fuel from too much suppression, need to be heavily cut, as well as burned. Loggers and President Bush find this a desirable forest policy, since they can both cut and prevent fires. They keep Covington well funded. But other environmentalists are not so sure, even about the ponderosa pines in Arizona, and are quite sure that one ought not to extrapolate a "one size fits all" to policy for other kinds of forests. Summer fires in 2002 in the West have heated up this debate. (v.13,#4)


Malecki, Becky, Spiritual Benefits of Wilderness, a M. S. thesis completed in the Department of Human Development, Colorado State University, spring 1993, with a principal advisor Beverly Driver, United States Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins. (v4,#2)

Maler, Karl-Goran, "Economic Growth and the Environment," Encyclopedia of Biodiversity 2: 277-284. Will economic growth deteriorate or improve the environment? The general finding for many pollutants is that a country with a very low income does not have much pollution but when the scale of the economy grows, for example, as measured by GDP per capita, emissions of these pollutants will increase. However, when the income per capita is high enough, the economy will reach a turning point and pollution will decrease with further increases in per capita income. However, empirical and conceptual challenges remain. (v.11,#4)

Malhi, Yadvinder, J. Timmons Roberts, Richard A. Betts, Timothy J. Killeen, Wenhong Li, and Carlos A. Nobre. AClimat Change, Deforestation, and the Fate of the Amazon.@ Science Vol. 319, no. 5860 (11 January 2008): 169-72. The forest biome of Amazonia is one of Earth's greatest biological treasures and a major component of the Earth system. This century it faces the dual threats of deforestation and stress from climate change. The authors summarize some of the latest findings and thinking about these threats, explore the consequences for the forest ecosystem and its human residents, and outline options for the future of Amazonia.

Mallin, MA; Posey, MH; McIver, MR; Parsons, DC; Ensign, SH; Alphin, TD, "Impacts and Recovery from Multiple Hurricanes in a Piedmont-Coastal Plain River System," Bioscience 52(no.11, 2002): 999-1010.
Mallory, Chaone. *Ecofeminism and Forest Defense in Cascadia: Gender, Theory, and Radical Activism.* @ *Capitalism, Nature, Socialism* Vol. 17, no. 1 (2006): 32-49. The article focuses on the nature of ecofeminism and its actions for the protection of forests in Western U.S. and Canada. The continued increase of forest protection movements are organized mainly by women. It must also be emphasized that local environmental struggles always take place in a global context, which always include the historical movements and intrigues of capitalism, the physical and cultural variability of the ecological region. A feminist perspective is relevant to understanding the global environmental crisis. Ecofeminism contains a constructive, prefigurative vision that attempts to transform existing power relations both intra and trans-human in ecologically sound and socially just actions. In 2006 Mallory accepted a position as Assistant Professor of Environmental Philosophy at Villanova University. She completed her doctoral degree in Environmental Science, Studies, and Policy from the University of Oregon after successfully defending her dissertation on the topic of developing ecofeminist models and methods of political and legal representation for and with the more-than-human world.


Maloof, Joan, *Teaching the Trees: Lessons from the Forest*. Athens: University of Georgia Press, 2005. We can never learn enough from the trees. Trees have a spiritual dimension that cannot be quantified. Parables to live by offered by a story-teller biologist. Maloof teaches biology and environmental studies at Salisbury University, Salisbury, Maryland.


Potentially Responsible Parties violates the Due Process Clause of the Fifth Amendment. In addition to suggesting alternatives to the current liability and settlement schemes, he suggests that nonsettling party interests should be reexamined, and posits that nonsettling parties deserve additional safeguards to protect their constitutionally guaranteed due process rights. (v8,#3)

Man and Nature Center, Odense University, Denmark. This Center operated under a five year funding grant and produced many relevant publications in environmental philosophy, policy, and ethics. Its operations ended last summer (June 1997), although some of its publications, such as a Danish anthology in environmental ethics and a book by Finn Arler on Cross-Cultural Protection of the Environment, are still in press.

A list of publications is available at:
http://hum.ou.dk/Center/Hollufgaard/
The list and many of the publications are in both English and Danish. Hollufgaard is the name of a research and conference center adjacent to the University, where the project was located. One philosopher associated with the project was Finn Arler, who has now returned to the philosophy department at Aarhus University. His address: Institut for Filosofi, Aarhus Universitet, Ndr. Ringgade, bygn 328, DK-8000 Aarhus C, Denmark. Tel. +45 86 19 14 92. E-mail: filfa@hum.aau.dk (v.8,#4)

Manahan, Stanley E. Environmental Science and Technology. Boca Raton, FL: St. Lucie Press, 1997. 672pp. $49.95. The traditional environmental spheres of water, air, earth, and life, and the "anthrosphere" and the impact of human activities, especially technology, on the Earth. (v8,#3)


Manca Graziadei, Antonio J.; Marini, Pasquale; and Amisano, Benedetta. "Environmental Law in Italy," Journal of Environmental Law & Practice 3(no.3, Nov. 1995):40- . Italy's environmental regulatory system covers all areas of pollution, but enforcement is inconsistent. (v6,#4)


Mander, Jerry, Goldsmith, Edward, eds. The Case Against the Global Economy. San Francisco: Sierra Club Press, 1996. 386pp. $28 cloth. Essays by more than forty economic, agricultural, and environment experts who argue for local production and social equity. (v7,#4)

Mandiberg, Susan F., "The Dilemma of Mental State in Federal Regulatory Crimes: The Environmental Example", Environmental Law, 25(No.4, 1995):1165- . Mandiberg draws upon Supreme Court case law and traditional common-law principles to suggest a framework for interpreting the mental state provisions of environmental and other regulatory crimes. Unlike other commentators, she suggests that mental-state analysis be grounded in notions of moral wrongdoing, understood from a modern perspective. Professor Mandiberg then applies this framework to the Resource Conservation and Recovery Act, the Clean Water Act, and the Migratory Bird Treaty Act to resolve some outstanding issues and illuminate others that have not yet been widely addressed by the courts. (v7,#1)
Manes, Christopher, "Philosophy and the Environmental Task," *Environmental Ethics* 10(1988):75-82. Manes argues that environmental ethics is a "negative ethics" that offers the task of resistance to the totalizing metaphysics of technology. As a philosophy, environmental ethics must be concerned with action, not philosophical dialectics, logic, or theology. Solid argument by a non-academic philosopher. (Katz, Bibl # 2)

Manes, Christopher, *Green Rage: Environmentalism and the Unmaking of Civilization*. New York: Little, Brown. 291 pages. $18.95. Manes, once a Fulbright scholar and early associate editor of *Earth First!*, wrote *Green Rage* during his first year of law school at the University of California at Berkeley. He chronicles the historical events, political context, and social impetus that created the radical environmentalist groups, such as Greenpeace and *Earth First!* Radical environmentalism may be the last chance for turning away from destroying the planet to cohabiting the planet with other life forms. *Green Rage* is already a best-seller on the West Coast. (v1,#4)


Manes, Christopher. "Philosophy and the Environmental Task." *Environmental Ethics* 10(1988):75-82. Although the particular ethical consequences of biocentrism can be defended at a logical level, the centrality of problems with valutational frameworks in biocentric ethics leads to ontological ambiguities which contribute to the broader problematic of modern metaphysics. I suggest, however, that this may actually help to thematize the relationship between the metaphysical foundations of environmentalism and its social task. Mysticism and phenomenology, including the concept of the "ecological self," attempt to settle these ambiguities in a dialectical opposition to the technological world view behind the environmental crisis. Whatever ontological stability they achieve, however is at the expense of being assimilated by the same kind of metaphysical totalization characterizing technological thinking. Unlike anthropocentrism and the stewardship model of environmentalism, nevertheless, these difficulties for biocentrism lead to positive results: the ambiguities in the search for philosophic stability and foundational certainty can act as a cue to the nonmetaphysical task of analyzing and resisting technological power. The result may be a "negative ethics," but one that holds out the possibility of confronting the real power relations of technological culture (and the use of ethics within them), rather than pursuing the endless project of discovering the hidden source of value and meaning. Manes is a graduate student in Old English Literature and Medieval Studies at the University of Oregon. (EE)

Manes, Christopher. "Nature and Silence." *Environmental Ethics* 14(1992):339-50. A viable environmental ethics must confront "the silence of nature"--the fact that in our culture only humans have status as speaking subjects. Deep ecology has attempted to do so by challenging the idiom of humanism that has silenced the natural world. This approach has been criticized by those who wish to rescue the discourse of reason in environmental ethics. I give a genealogy of nature's silence to show how various motifs of medieval and Renaissance origins have worked together historically to create the fiction of "Man," a character portrayed as sole subject, speaker, and telos of the world. I conclude that the discourse of reason, as a guide to social practice, is implicated in this fiction and, therefore, cannot break the silence of nature. Instead, environmental ethics must learn a language that leaps away from the motifs of humanism, perhaps by drawing on the discourse of ontological humility found in primal cultures, postmodern philosophy, and medieval contemplative tradition. Manes is a graduate student in Old English Literature and Medieval Studies at the University of Oregon. (EE)

Mangels, Ann Reed, "Vegan Diets for Women, Infants, and Children", *Journal of Agricultural and Environmental Ethics* 7(1994):111-122. Infants, children, adolescents, and pregnant and lactating women have been described as groups with special needs and at higher risk for nutritional deficiencies than adult males. Vegan diets can be safely used by these groups if foods and in some cases supplements are selected with provide a healthful and nutritionally adequate diet.

There is a scarcity of studies of "newer" vegetarians who are often more mainstream than the vegetarians of the 1960's and 1970's. In some instances this has led to assumptions about today's vegans which are based on out-dated information. Thorough scientific new studies are needed. Mangels and Havala are nutrition advisors at the Vegetarian Resource Group, Baltimore, MD.


Mann, Charles C. and Mark Plummer. "Is Endangered Species Act in Danger?" *Science* 267 (March 3, 1995): 1256-1258. The Act needs to be reauthorized, and refunded, this year. Far more plants and animals are being added to the list than are leaving it. Critics say that act is as fault; supporters say the budget for enforcement is far too small. Critics say few species are being recovered; supporters say that you should not expect high recovery rates in an intensive care emergency room. A frequent theme is rather pragmatic: since the Act isn't working, and can't be made to work because it is too expensive and landowners won't cooperate, maybe we should do something else. Mann and Plummer are co-authors of *Noah's Choice: The Future of Endangered Species*. Couple any reading of this with the review by Gary Paul Nabhan in *Orion*, Spring 1995, pp. 60-61: "Noah's Choice is a highly engaging and challenging but ultimately disappointing polemic on why endangered species conservation efforts are based on unsubstantiated scientific claims that do not sufficiently yield to human concerns. Although the authors are respected journalists ..., they suffer from a chronic inability to deal with a trait inherent to modern science: uncertainty." (v6,#1)

Mann, Charles C., and Plummer, Mark L., "Army Corps Seized by Dam Indecison," *Science* 287 (7 January 2000):27. The U.S. Army Corps of Engineers pleads for more time to decide whether to remove four dams on the Snake River to save endangered salmon in the Pacific Northwest. The
Corps finds that there would be great benefits to wildlife, but heavy economic and social impacts. Critics say that ample data is already in and that the Corps is stalling. (v10,#4)

Mann, Charles, "How Many is Too Many?" Atlantic Monthly, February 1993. The answers to this question since the 1700's have varied between those who believe that continued population growth will eventually lead to an environmental catastrophe (such as economist Robert Malthus in 1798 and the biologist Paul Ehrlich in his 1968 book The Population Bomb) and those who argue that increasing technological efficiency and changing social/economic patterns will solve the problem (such as the Marquis de Condorcet in 1794 or A. B. and L. H. Louvins in their 1991 essay "Least Cost Climatic Stabilization"). At the Rio Earth Summit the developing countries of the South responded to the developed countries of the North saying that the problem is not one of overpopulation in the South but of excessive consumption in the North. This ignores the increasing numbers of well-off people in developing countries who consume at the same unsustainable level as those in developed countries. India, for example, has between 150-300 million rather wealthy consumers. (v8,#3)


Mann, Charles C., "Extinction: Are Ecologists Crying Wolf?" Science, August 16, 1991, Critics say the mega-extinction predictions are exaggerated. Part of the trouble is whether the theory of island biogeography is applicable to tropical forests; part of the trouble is general ignorance about what is there, especially with insects and fungi, part of the trouble is how species are related to ecosystems, and how much human interference upsets systems outside the temperate zone. (v2,#3)

Mann, Charles C., "The Real Dirt on Rainforest Fertility," Science 297(9 August 2002):920-923. Most Amazonian rainforest has poor soil; the nutrients are in the forests above the surface. But there is a soil named terra preta, prized for its great productivity. Archaeologists now believe these soils, often in 1-5 hectare plots, were created by ancient Amazonians through some agricultural practices at which we can mostly only speculate. Some argue for a modified slash and burn called "slash and char," but others claim the ancients had no way to cut down large numbers of trees. There are research efforts to create similar soils, in the hope of greater Amazonian fertility. Still others lament that the rainforest will be destroyed anyway, whether for poorer or richer soils. (v.13, #3)

Mann, Charles C. and Plummer, Mark L., "The Butterfly Problem," Atlantic Monthly, January 1992. Grounded in "the Noah principle"--the view shared by many conservationists that all species have a right to exist--the Endangered Species Act insists that we attempt to save every threatened species. This inflexibility has now become economically untenable. Because the government does not have the means to preserve endangered species, let alone a coherent plan, its decisions are haphazard. Private landowners often find themselves paying for the preservation of species they never heard of. (v3,#1)

Mann, Charles C. and Plummer, Mark L., "Forest Biotech Edges Out of the Lab," Science 295(1 March 2002):1626-1629. Transgenic forestry? Frankentrees? New, high-intensity tree plantations are setting the stage for rapid biotechnological change in forestry. But the novel methods may never be used if the ecological risks and economic obstacles cannot be overcome.
In a test plantation in drylands Oregon, 7200 hectares of cloned hybrid poplars, planted in square blocks 400 meters to a side, receive water, fertilizer, and pest treatments under a computer-controlled system, and are growing at ten times the usual rate for poplars. But ecologists and others worry what if the genes from these huge mechanized plantations spread into the wild? (v.13, #3)

Mann, Charles C., "Unnatural Abundance," New York Times, November 25, 2004, an op-ed piece. Mann de-bunks the first Thanksgiving and its myth of abundance on the American landscape. Most of the productivity and many invasives were introduced either by the Europeans or were present by virtue of Indian management of the landscape, which kept the Eastern forests game-friendly, although the Indians had just been decimated before the Pilgrims arrived by a viral disease caught from shipwrecked French sailors. Mann even thinks the buffalo herds were managed by the Indians (without horses), and that the huge herds the Europeans encountered were a result of the lack of Indian control, since the virus had decimated them. The Indians likewise managed the huge flocks of passenger pigeons. (v.14, #4)

Mann, Bonnie, "World Alienation in Feminist Trought: The Sublime Epistemology of Emphatic Anti-Essentialism," Ethics and the Environment 10(no. 2, 2005):45-74. The alliance between feminism and postmodernism in the American academy has brought about a revolution in feminist epistemology. Many feminists have taken on the epistemology of the simulacrum. Here "the real" plays a part only as that which dissolves into the appearances themselves. Behind the appearances, if there were such a place, would be only an abyss of absence. With this revolution in feminist epistemology comes a wholesale displacement of the feminist project. The ultimate price we pay for the feminist alliance with postmodernism may well be a material displacement, in which we are dispossessed of our ability to inquire into and articulate our relationship to the earth itself. We find this planet we inhabit, this physical place that sustains us moment by moment, to be effectively shut out of what now passes as "good" feminist thought. Mann is in philosophy, University of Oregon, Eugene, (Eth&Env)


Mann, Stefan, "Ethological farm programs and the market for animal welfare," Journal of Agricultural and Environmental Ethics 18(2005):369-382. Ethological farm programs in Switzerland are compared with environmental farm programs. Animal welfare is not a public good, and so the demand for animal welfare has a different standing in economic theory than the demand for a clean environment. The supply of animal welfare by farmers, however, largely follows the patterns known from the delivery of environmental goods. The design of ethological farm programs should be based on broad public discussions as described by deliberation theorists rather than willingness-to-pay studies. (JAEE)

Mann, Stefan, "Different Perspectives on Cross-Compliance," Environmental Values 14(2005):471-482. Cross-compliance has proven its effectiveness, as can be shown by looking at the Swiss experience with cross-compliance since 1999. Besides describing the existing cross-compliance practices in Switzerland, the paper shows different perspectives on the efficiency and fairness of cross-compliance. It concludes that transaction cost advantages justify cross-compliance only in few cases. Usually, it will be more efficient to decouple social and environmental policy. The strong support for cross-compliance by the Swiss population is explained by a perceived unfairness in the distribution of property rights between farmers and society. If property rights would be redistributed, there probably would be no more need for cross-compliance. Mann is at the Federal Research Station for Agricultural Economics and Engineering, Ettenhausen, Switzerland. (EV)

Manning, Richard, Against the Grain: How Agriculture Has Hijacked Civilization. New York: North Point Press, 2004. Agriculture's social, economic, and political effects on humans and their environment, from the domestication of animals and plants ten thousand years ago to today's large scale farming by corporate megafarms. Agriculture, now agribusiness, has evolved into a profit-driven industry where selected crops are designed more for creating wealth through trade than for feeding people.

Manning, Rita C. "Air Pollution: Group and Individual Obligations." Environmental Ethics 6(1984):211-25. The individual motorist often defends his unwillingness to change his driving habits in the face of air pollution by pointing out that a change in his actions would be insignificant. The environmentalist responds by asking what would happen if everyone did change. In this paper I defend the environmentalist's response. I argue that we can appeal to the following principle to defend both group and individual obligations to clean up air: if the consequences of everyone doing "a" are undesirable, then each and every one ought to do what he can to prevent the undesirable consequences. Manning is in the philosophy department, California State University, Hayward, CA. (EE)

Manning, Rita C., Speaking from the Heart: A Feminist Perspective on Ethics Rowman and Littlefield, 1992. 224 pages. $14.99 paper; $40.00 cloth. Contains a section "Caring for Animals: Should a Feminist Care?" Manning is in the Department of Philosophy, San Jose State University. (v4,#1)

Manning, Robert, William Valliere, and Minteer, Ben. "Values, Ethics, and Attitudes Toward National Forest Management: An Empirical Study." Society & Natural Resources 12(no. 5, July 1999):421-436. A study measuring environmental values and ethics and exploring their relationships to attitudes toward national forest management. Case study: Green Mountain National Forest, Vermont. Respondents (1) favor nonmaterial values of national forests, (2) subscribe to a diversity of environmental ethics, including anthropocentric and bio-/ecocentric, and (3) support emerging concepts of ecosystem management. The authors are in the School of Natural Resources, University of Vermont.

Manning, Robert E., and Valliere, William A. "Environmental Values, Environmental Ethics, and Wilderness Management: An Empirical Study." International Journal of Wilderness 2, no. 2 (August 1996): 27-32. A study of visitors to the Breadloaf Wilderness in Vermont. Both wilderness values and environmental ethics can be isolated and measured and are significantly related to wilderness purity. Manning teaches in natural resources at the University of Vermont, Valliere is a research assistant there. (v7, #3)


Manning, Robert, Valliere, William, and Minteer, Ben, "Values, Ethics, and Attitudes Toward National Forest Management: An Empirical Study," Society and Natural Resources 12(1999):421-436. A study measuring environmental values and ethics and exploring their relationships to attitudes toward national forest management. Case study: Green Mountain National Forest, Vermont. Respondents (1) favor nonmaterial values of national forests, (2) subscribe to a diversity of environmental ethics, including anthropocentric and bio-/ecocentric, and (3) support emerging concepts of ecosystem management. The authors are in the School of Natural Resources, University of Vermont.

Manning, Robert E., "The Nature of America: Visions and Revisions of Wilderness," Natural Resources Journal 29(1989):25-40. Wilderness has proved to have not only the values Congress anticipated in the Wilderness Act, but other, unexpected values as well. Manning is professor in the School of Natural Resources, University of Vermont, Burlington. (v3,#3)
Manning, Russ. "Environmental Ethics and Rawls' Theory of Justice." *Environmental Ethics* 3(1981):155-65. Although John Rawls' *A Theory of Justice* does not deal specifically with the ethics of environmental concerns, it can generally be applied to give justification for the prudent and continent use of our natural resources. The argument takes two forms: one dealing with the immediate effects of which impact the present society, should be subject to environmental controls because they affect health and opportunity, social primary goods to be dispensed by society. Delayed environmental impacts, affecting future generations, are also subject to control because future generations have a just claim upon our natural resources—the generation to which a person belongs is an arbitrary contingency which should not exclude persons not yet born from consideration in the original contract of society. Manning is a free-lance science writer and editor in Knoxville, TN. (EE)


Manson, Neil A., "The Precautionary Principle, The Catastrophe Argument, and Pascal's Wager," CPTS (Center for Philosophy, Technology and Society, University of Aberdeen, Scotland) *Ends and Means*, vol 4, no. 1, Autumn 1999, pp. 12-16. Environmentalists often invoke the precautionary principle, that, where there are real uncertainties, especially the possibility of catastrophe, one ought to act conservatively. They favor the precautionary principle over cost-benefit analysis, thinking that cost-benefit analysis is difficult, benefits likely to be more easily estimated than harms. Further, they wish to place the burden of proof on those who wish to introduce changes. But, Manson argues, some version of cost-benefit analysis is unavoidable. Instead of resisting it, environmentalists should consider embracing it. They will be pleasantly surprised by how often cost-benefit analysis rules in their favor. Manson is Gifford Research Fellow at the University of Aberdeen. (v10,#4)


Manson, Neil A. "Formulating the Precautionary Principle." In part one, I identify the core logical structure of the precautionary principle and distinguish it from the various key concepts that appear in the many different formulations of the principle. I survey these concepts and suggest a program of further conceptual analysis. In part two, I examine a particular version of the precautionary principle dubbed "the catastrophe principle" and criticize it in light of its similarities to the principle at work in Pascal's Wager. I conclude with some suggestions for advocates of the precautionary principle who wish their formulation to avoid the pitfalls confronting the catastrophe principle. *Environmental Ethics* 24(2002):263-274. (EE)

Manson, Neil A., "The Precautionary Principle, The Catastrophe Argument, and Pascal's Wager," CPTS (Center for Philosophy, Technology and Society, University of Aberdeen, Scotland) *Ends and Means*, vol 4, no. 1, Autumn 1999, pp. 12-16. Environmentalists often invoke the precautionary principle, that, where there are real uncertainties, especially the possibility of catastrophe, one ought to act conservatively. They favor the precautionary principle over cost-benefit analysis, thinking that cost-benefit analysis is difficult, benefits likely to be more easily estimated than harms. Further, they wish to place the burden of proof on those who wish to introduce changes. But, Manson argues, some version of cost-benefit analysis is unavoidable.
Instead of resisting it, environmentalists should consider embracing it. They will be pleasantly surprised by how often cost-benefit analysis rules in their favor. Manson is Gifford Research Fellow at the University of Aberdeen. (v.11,#1)


Mapel, David R., and Nardin, Terry, eds., *International Society: Diverse Ethical Perspectives*. Princeton, NJ: Princeton University Press, 1998. The moral foundations of the international order. Fifteen contributors. The character of international society, the authority of international law and institutions, and the demands of international justice. Mapel is in political science at the University of Colorado at Boulder. Nardin is in political science at the University of Wisconsin-Milwaukee. (v9,#1)


Maraga, E.K. "A Review of Range Production and Management Extension Activities in Kenya," *Journal of Agricultural and Environmental Ethics* 11(1999):131-144. The paper presents an overview of the development of range management extension activities in Kenya. The status quo of range management activities is discussed with particular reference to extension infrastructure, scope of extension interventions and mechanisms of dissemination of these innovations. On the basis of the nature of available innovations and efficiency of dissemination mechanisms, the paper emphasizes the need for future institutional reforms to facilitate successful application of technological interventions, validation of the Kenyan innovation Diffusion Model and enhancement of the social acceptability of technological interventions. KEY WORDS: range management extension, range production extension technology, extension infrastructure, extension innovation dissemination, extension constraints, range research


Margaret Anne Scully, *Human Rights and the Environment (Indigenous Communities)*, University of Southern California, Ph.D thesis, 1997. 203 pages. Indigenous communities are commonly held to live in harmony with nature and yet are not immune to the environmental degradation wrought by development. Solutions to environmental problems need not be "grand schemes" or universally applicable standards. Environmental assessments intended to facilitate the "delicate balancing" of competing interests are often culturally biased. Important international agreements have broad-based aspirations but may evolve into customary norms. "Eco-cultural security" is explored in light of the desperate circumstances of many indigenous communities. Divergent cross-cultural environmental ethics can be used to privilege mainstream environmental principles. The advisor was Sheldon Kamieniecki. (v.10,#1)

Margolis, Michael, "Fending Off Invasive Species: Can We Draw the Line Without Turning to Trade Tariffs?" *Resources* (Resources for the Future), Spring 2004, no. 153, pages 18-22. Nations can wish to ban imports that may harbor invasive species, but the environmentalist concerns have a way of combining with others interested and who wish to ban the same imports for protectionist policies. Inspection of the goods is one way without tariffs, but can be costly and ineffective. Tariffs is another way to keep out the goods that might bring in invasive species. Sorting this out. (v. 15, # 3)


Margulis, Lynn, "Science Education, USA: Not Science, Not Yet Education, The Ecology Example," pp. 307-315 in Margulis, Lynn and Sagan, Dorion, *Slanted Truths* (New York: Springer-Verlag, 1997). A commentary on science education, kindergarten through graduate school, especially in ecology. "The answers to nearly all the major philosophical questions are either found in or illuminated by the science of life, especially ecology, whose stated goal is the elucidation of the relationship of organisms to environment. ... Philosophical insights garnered from the life sciences are suppressed by the arbitrary pigeonholing of rigid academic traditions? What is our relation, as *Homo sapiens* mammals, with our environment? How much and what sort of land is required to ensure the health and growth of a person, a family? ... These enlightening questions, of intrinsic interest, cannot even be mused in the academic-environment that requires "covering the material" (p. 311) Margulis teaches biology at the University of Massachusetts, Amherst. (v9,#2)

Marietta, Don E. "The Interrelationship of Ecological Science and Environmental Ethics." *Environmental Ethics* 1(1979):195-207. A recent trend among environmentalists (e.g., Aldo
Leopold) of basing ethical norms for land use, resource management, and conservation on ecological principles such as homeostasis is examined, and a way to justify such an ethical approach through analysis of moral judgment is explored. Issues such as the is/ought impasse, the connection between value judgments and reasons for acting, and the question of whether moral judgments are definitive and categorical are treated as they relate to an ecological ethic, i.e., an environmental ethic grounded in ecological science. I argue that such an ethic is in such regards as sound as more traditional approaches. Marietta is in the philosophy department, Florida Atlantic University, Boca Raton, FL. (EE)


Marietta, Don E., Jr., "Environmentalism, Feminism, and the Future of American Society." The Humanist 44, no. 3 (May/June 1984): 15-18, 30. A popularized account of the blending of environmental thought and the main ideas of feminism. More rigorous presentations can be found in Environmental Ethics, 1984-87. (Katz, Bibl # 1)

Marietta, Don E., Jr., "Environmental Holism and Individuals," Environmental Ethics 10(1988):251-258. A defense of a holistic environmental ethic that does not reject humanistic ethics. Marietta criticizes extreme holism for its abstraction and reductionism; it neglects the entire range of human experience and human ethical history. Marietta offers an important analysis, but the statement of the position is too brief; it requires a more detailed and longer argument. (Katz, Bibl # 2)

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. (v5,#4)

Marietta, Don E. "World Views and Moral Decisions: A Reply to Tom Regan." Environmental Ethics 2(1980):369-71. Tom Regan criticizes my thesis that obligation toward the environment is grounded in a world view and thereby has a moral overridingness which mere interests and desires do not have. He holds that my approach is too subjectivistic. I counter, first, by explaining that phenomenology, which I use in my analysis of moral obligation, is not subjectivistic in the way emotivism or prescriptivism in ethics is subjectivistic. Second, I argue that world views are products of learning and experience of one shared world, that most world views share large areas of agreement, and that they can be argued for and criticized. Marietta is in the philosophy department, Florida Atlantic University, Boca Raton, FL. (EE)

Marietta, Don, Jr., and Lester Embree, eds. Environmental Philosophy and Environmental Activism. Lanham, Md: Rowman and Littlefield, 1995. 224 pages. Should environmental philosophy and ethics be seen as a form of applied philosophy or something else, perhaps best called practical philosophy. How should environmental philosophy be practiced in life, especially in the lives of academics? Contributors: J. Baird Callicott, "Environmental Philosophy is Environmental Activism: The Most Radical and Effective Kind"; Timothy Casey, "The Environmental Roots of Environmental Activism"; Lester Embree, "Phenomenology of Action for
Marietta, Don E., Jr. "Ethical Holism and Individuals." *Environmental Ethics* 10(1988):251-58. Environmental holism has been accused of being totalitarian because it subsumes the interests and rights of individuals under the good of the whole biosphere, thus rejecting humanistic ethics. Whether this is true depends on the type of holism in question. Only an extreme form of holism leads to his totalitarian approach, and that type of holism should be rejected, not alone because it leads to unacceptable practices, but because it is too abstract and reductionistic to be an adequate basis for ethics. Marietta is in the philosophy department, Florida Atlantic University, Boca Raton, FL. (EE)


Markarian, Mike. "Bowhunting: Culling or Crippling?" *The Animals' Agenda* 16, no.1 (1996): 17. (v7, #3)

Markarian, Michael, "Tally-ho, Dude!" *The Animals' Agenda* 19(no. 6, Nov 01 1999):22- Fox hunting isn't a British relic; it's an American reality, and Michael Markarian tells its dirty little secrets. (v10,#4)

Markie, Peter J., "Feinberg on Moral Rights", *Australasian Journal of Philosophy*, 62 (1984) 237-45. Joel Feinberg believes that a moral right is a special kind of claim. He uses his explanation of what it is to have a moral right to defend substantive claims about the rights of animals and future generations. It is argued that Feinberg's concept of being in a position to claim is problematic. Four ways to understand this concept are examined: two of these are inconsistent
with Feinberg's views on the rights of animals and members of future generations and the other
two, while consistent with these views, are flawed in other ways. This leads the author to
conclude that Feinberg has failed to provide a correct explanation of what it is to have a moral
right which is consistent with his position on the rights of animals and future generations.

Markku Oksanen and Juhani Pietarinen (eds.), Philosophy and Biodiversity. Nelson, Michael P.,

Marks, Alexandra. "Environmentalists Target Java-Drinkers to Save Birds." The Christian Science
Monitor 89 (10 July 1997): 3. Changes in coffee-growing methods are blamed for drops in
migratory bird populations. (v8,#2)

Marks, Jonathan, What It Means to be 98% Chimpanzee: Apes, People, and their Genes.
Berkeley: University of California Press, 2002. Not much more than it means for humans to be
70% fish and 25% banana, according to Marks. Humans do share many genes with animals and
plants, but from this genetic similarity little follows about how similar humans are anatomically and
behaviorally. The shared genes are widely used in various life forms, our protein molecules are
indeed similar to those in chimps. But our cognitive and cultural capacities are very different. For
Marks this also weakens the argument that chimpanzees deserve human rights and equal
protections. Marks is a molecular anthropologist.

Marks, Jonathan, What It Means to be 98% Chimpanzee: Apes, People, and their Genes.
Berkeley: University of California Press, 2002, 2003. If we are 98% chimp, then we should go
naked and sleep in trees 98% of the time? Numbers depend on perspective. Humans have three
times as much brain size as chimps, so by that standard we are 300% more than chimps.
Obviously humans are quite different from chimps in their mental capacities and cultural
developments, so the 98% figure is only true in a quite limited sense. Marks is in anthropology at
the University of North Carolina, Charlotte. (v. 15, # 3)

Marks, Alexandra, "Environmentalists Target Java-Drinkers to Save Birds," The Christian Science
Monitor 89 (10 July 1997): 3. In the past 20 years, almost half of the old rain-forest-like coffee
plantations have been replaced by high-yield, sun-grown farms. The old way provided habitat
for neotropical migratory birds. Since 1980, bird populations have dropped alarmingly: for
example, Baltimore orioles have declined 20-25%, wood thrushes 40%, golden-winged warblers
50%. Other factors, too, are involved. Costa Rica has launched an "ECO-OK" project to identify
shade-grown coffee to consumers. Perhaps some of the old farms can be saved, and some
birds, too. (v8,#2)

Marks, R., "Review of: Judith Shapiro, Mao's War against Nature: Politics and Environment in
Revolutionary China," Environmental History 7(no.3, 2002): 508-09. (v.13,#4)

Markus, Tomislav, "Ekoloska etika -- razvoj, mogucnosti, ogranicenja (Environmental Ethics,
Development, Possibilities, Limitations), Socijalna Ekologija (Journal for Environmental Thought and
Sociological Research (Zagreb, Croatia) 13(No. 1, 2004):1-23 (in Croatian) (missing diacritical
marks in the titles) Overview of environmental ethics in English-speaking countries for the last
three decades. Baird Callicott, Holmes Rolston, Eric Katz, Andrew Light, Robin Attfield and
others. Environmental ethicists have given a valuable critique of environmental destructiveness
of modern society and anthropocentric tendencies in Western moral philosophy and pointed to
many inconsistencies in Western thought about the human relation to nature. The main
insufficiency in their work is the lack of a radical enough critique of technical civilization.
A second insufficiency is an idealistic approach which underestimates the material factors.
Markus is at the Kroatisches Institut fur Geschichte, Zagreb. (v. 15, # 3)

Marler, Peter., "Social Cognition: Are Primates Smarter than Birds?" pages 1-32 in Nolan, Jr., Val,
are many striking similarities between the accomplishments of birds and primates. Their achievements in different forms of social learning are surprisingly similar with regard to the acquisition of both patterns of responsiveness to environmental stimulation and new motor patterns. Examples of tool use are as frequent and as complex in birds as in primates, although questions of social transmission remain moot in both cases. Primates seem to excel, however, in aspects of social cognition. There are cases of complex social cognition where primate accomplishments appear to be outstanding. . . . Accomplishments in the domain of social communication are just as impressive in birds as in monkeys and apes, and the ability for vocal learning is an outstanding avian achievement that leaves non-human primates far behind. I am driven to conclude, at least provisionally, that there are more similarities than differences between birds and primates. Each taxon has significant advantages that the other lacks” (p. 22).


Marques, Soromenho Viriato, "Justica e Sentido da Terra (Justice and a Sense of the Earth)," *Philosophica* (Lisbon: Departamento de Filosofia, Faculdade de Letras da Universidade de Lisboa) 1, 1993, pp. 31-44.  What is the significance today of the problem of justice, as we now have to consider it? This analysis attempts to clarify the foundation of this question, specifically through determining the interrelationships between the enormous environmental-political problems of our century and the principles of the philosophy of nature and of the philosophy of politics in the modern era. This includes an analysis of the failure of political science, of autonomy and secularization, of practical and political reason, and of the eclipse of nature within the framework of anthropological idealism. The author is professor of philosophy at the University of Lisbon.  Address: Departamento de Filosofia, Cidade Universitaria, 1699, Lisboa Codex, Portugal.  Home address: Praceta Dr. Joaquim Ferreira de Sousa, Lote 7-4.  C, Urbanização Quinta de Vanicelos, P-2900 Setúbal, Portugal.  

Marquette University, Interdisciplinary Minor in Environmental Ethics, *Generating and Using Electricity in the United States.*  A report prepared by students in the first capstone seminar for the Interdisciplinary Minor in Environmental Ethics.  Accessible through:  [http://www.inee.mu.edu/Capstone%202003/Proposal.htm](http://www.inee.mu.edu/Capstone%202003/Proposal.htm)

An ambitious project that spanned the 2003 Spring semester, ten students identified the religious and philosophical foundations for approaching electricity use and generation from an ethical perspective (appropriated from Jesuit spirituality, Aldo Leopold, and the Roman Catholic principle of subsidiarity), researched relevant topics on use and generation by renewable and non-renewable sources, produced seventeen reports, and concluded to ninety-two recommendations through an iterative, consensus process.

Affirmation of their efforts by US Senator Russ Feingold’s environment aide, Mary Frances Repko, proved to be a highlight of the capstone experience.  She flew to Milwaukee while in the process of participating in the mark-up of the Senate’s energy bill and engaged them in an in-depth discussion on their recommendations.  When pressed for at least one to include in the bill, the students opted for an awareness alert on electricity bills that quantified environmental effects from the amount of electricity used.  Jame Schaefer was the advisor.  

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


Marshall, Nina T., The Gardener's Guide to Plant Conservation. By the World Wildlife Fund in conjunction with the Garden Club of America. ISBN 0-891-139-4. Paper. $ 12.95. Orders to World Wildlife Fund, P. O. Box 4866, Hampden Post Office, Baltimore, MD 21211, Phone 410/516-6951. There is an enormous trade in threatened and endangered wild plants sold to gardeners, and increasing interest by gardeners to control this by authenticated statements of origin. The Netherlands, which was once the worst offender, has become a leader in the labeling of plants for the market place: cyclamens, miniature daffodils, fritillarias, trilliums, orchids, cacti, trout lilies, and others. Winter daffodil (Sternbergia candida) was described as a new species in 1979 and, as a result of collecting for the garden trade, may be extinct today. (v4,#4)

Marshall, Alan Hilary, The Concept of Environmental Ethics, M.A. thesis at the University of South Africa (UNISA), Pretoria, 1993. 133 pages. Human development and excesses threaten not only the continued existence of the human species but that of all other forms of life on earth. Environmental ethics ought to confront and contain this threat. There are two opposed kinds of philosophical positions: a nature-centered ethic, here called biocentrism, from which environmental ethics was developed, and homocentrism, which has arisen in opposition to biocentrism. Marshall argues for a homocentric view. The homocentric view is the world view that the peoples and nations of the world currently adopt; morality is largely worked out in that context, and it is the view most likely to be successful in environmental conservation. The supervisors were Z. Postma de Beer and P. Voice. (v6,#3)

Marshall, Brent K. "Globalisation, Environmental Degradation and Ulrich Beck's Risk Society. " Environmental Values 8(1999):253-275. ABSTRACT: This paper is organised in three interconnected parts. First, contemporary political economic approaches to understanding the structure of the global economic system are outlined and synthesised. Specifically, it is suggested that the current structural configuration of the globe is a transitional phase between the spatially-bounded configuration hypothesised by world-system theory and the configuration
hypothesised by globalisation theorists. Second, the contemporary problem of environmental
degradation is situated in a global structural context. Third, an outline and critique of Ulrich Beck's
theory of the "Risk Society" is presented to illustrate the increasing inadequacy of
nation-state-centric theories in explaining the dynamic linkage between global capitalism and local
environmental degradation. KEYWORDS: Globalisation, environmental degradation, nation-state,
world-system. Brent K. Marshall, Department of Sociology University of Tennessee 901 McClung
Tower, Knoxville, TN 37920, USA Email: marshall@utkux.utcc.utk.edu (EV)

Marshall, Carolyn, "Restoration of San Francisco Bay Salt Ponds Is Begun," New York Times,
July 26, 2004, p. A10. The goal is to return stagnant industrial pools to teeming tidal wetlands.
(v. 15, # 3)

Marshall, Eliot, "Is the Friendly Atom Poised for a Comeback?" Science 309(19 August
2005):1168-1171. The threat of global warming and high fossil fuel prices have inspired talk of a
revival of nuclear power, but skeptics say it is a poor investment and a worse security risk.
Nuclear is pollution free with regard to carbon dioxide, but is pollution laden with regard to
disposal of nuclear wastes. Nor is it clear that it is any cheaper. Several related stories in the
same issue.

Marshall, Alan, "A Postmodern Natural History of the World: Eviscerating the GUT's from Ecology
and Environmentalism," Studies in History and Philosophy of Biological and Biomedical Sciences
29 (no. 1, 1998):137-164. The plant ecologist Henry Gleason in 1926 was already a
postmodernist. If we characterize postmodernism as an emphasis on heterogeneity,
ephemerality, and anti-foundationalism, pluralism, fragmentation, indeterminacy, schizophrenia,
chaos, antiformalism, discontinuity, absence, playfulness, irony, localism, anarchacy and
ontological meaninglessness, Gleason's theory reflects such ideas in the ecological arena.
There remains a need for a neo-Gleasonian postmodern approach in which ecological
phenomena are examined using non-determinant, pluralist and local perspectives and that reject
the foundationalism and unifying approach of modernist science. This posits a view of the
Earth's biota highlighting fragmentation, anarchism, and non-interaction. Community ecology, as
opposed to the unifying and totalizing tendencies of ecosystems ecology, can claim to be the
intellectual site of such a postmodern natural history. But there is a final irony. There cannot be a
postmodern natural history, since natural history is fractured into undefinable and indefinite
fragmented associations which defy generalization. Marshall is in science and technology
studies, University of Wollongong, Sydney, Australia. (v.9,#3)

1992) has been republished in the US as Nature's Web: Rethinking Our Place in Nature (New
York: Paragon House, 1994), $29.95. A paperback edition published by Cassell is coming out
this year in UK. The book has received some excellent reviews, and Choice calls it "a wonderful
history of 'green' ideas."


pages., 25.00 hardcover, also in paper by Fontana, , 10.00. Chapters on Taoism, Proudhon,
Kropotkin, Gandhi, and Murray Bookchin. (v4,#1)

523 pp. $21.95 paper. Claims to be the first comprehensive overview of the intellectual roots of
the worldwide environmental movement--from ancient religions and philosophies to modern
science and ethics--and to synthesize these into a new philosophy of nature adequate for a
contemporary grounding of moral values and social action. (v7,#4)
Marshall, Peter. *Riding the Wind: A New Philosophy for a New Era*. London and New York: Cassell, 1998, 263pp. In this account of his mature thinking, Peter Marshall develops a dynamic and organic philosophy for the third millennium which he calls liberation ecology. Deep, social, and libertarian, liberation ecology seeks to free nature, society and individuals from their existing burdens so that they can all realize together their full potential. Riding the Wind presents a fresh and inspired vision which combines ancient wisdom and modern insights, reason and intuition, science and myth. Chapters include: The Way of the Universe, Nature's Web, Creative Evolution, Playful Humanity, Reverence for Being, The Family of Life, After the Leviathan, The Common Treasury, Dwelling Lightly on Earth, Learning to Live, The Alchemy of Love. John Clark, Professor of Philosophy at Loyola University, New Orleans, says: "Riding the Wind is a well written and accessible work that makes a strong statement of Peter Marshall's important and distinctive position in contemporary ecological thought. The book deserves to be read and discussed widely." Marshall is a full-time writer, and his many books include the highly acclaimed *Nature's Web: Rethinking our Place on Earth* and *Demanding the Impossible: A History of Anarchism*. (v9,#2)


Martell, Luke, *Ecology and Society: An Introduction*. Amherst: University of Massachusetts Press, 1994. Also: London: Polity Press, 1994. 230 pages. Chapters: Ecology and Industrialism; The Sustainable Society; Green Philosophy; The Green Movement; Ecology and Political Theory; Rethinking Relations between Society and Nature; The Future of Environmentalism. "I deal in particular with ... 'radical ecology' ... strands in environmental thinking which require ... fundamental changes in economic structure and value systems or either anthropocentric or eco-centric ethics. It is the most radical strands in which I am especially interested" (pp. 5-6). "Ecology, in short, revolutionizes thinking about the social and political world but also needs it. Both are important to change. An alliance of the green movement with social democratic and socialist movements, pushing for politically globally co-ordinated solutions, is the basis on which such change can be achieved" (p. 199). Martell is a sociologist at the University of Sussex, UK. (v.9,#4)


Martin, Brendan. "From the Many to the Few: Privatization and Globalization", *The Ecologist* 26(no. 4,1996):148. North and South, East and West, the public sector is under assault. In the name of greater "efficiency", public services have been "contracted out": development projects "franchised" to private companies; state spending slashed; user charges for basic services introduced or increased; and markets "deregulated". In the process, power and wealth have become increasingly concentrated and the ability of nation states to protect the public interest has been undermined. The chief beneficiaries have been transnational corporations which have used the auctioning-off of the state sector to integrate their operations further. (v7,#4)
Martin, Calvin Luther, *In the Spirit of the Earth: Rethinking History and Time*. Baltimore: Johns Hopkins University Press, 1992. 152 pages. $19.95. Teachers and writers of history must go beyond history-as-usual to speak of the much deeper story of humans and their connections to the earth. Martin earlier wrote *Keepers of the Game*, on native American relationships with the animals. The more participatory sense of the natural world held by small hunting groups led more clearly to the fundamental truth that nature conserves humans. (v4,#1)


Martin Enserink, "The Lancet Scolded Over Pusztai Paper," *Science* 286(22 October, 1999):565. Britain's most prestigious medical journal, *The Lancet*, published a transgenic food paper by Stanley Ewen and Arpad Pusztai claiming that rats fed transgenic potatoes had abnormalities in their intestines. The authors, especially Pusztai, have also claimed that transgenic potatoes can stunt rats' growth and impair their immune systems. Critics say the paper is deeply flawed. The *Lancet* editors admit the paper is controversial but reply that five of six referees (twice the usual number) recommended publication, if only to get the claims evaluated. There is currently a heated debate over transgenic foods in the U. K. See Ewen, Stanley W. B., and Pusztai, Arpad, "Effects of Diets Containing Genetically Modified Potatoes Espressing *Galanthus nivalis* Lectin on Rat Small Intestine," *The Lancet* 354 (October 16, 1999):1353-1354. The authors are pathologists at the University of Aberdeen. (v10,#4)

Martin, Evelyn, "The Last Mountain," *American Forests*, April 1993. "The Mt. Graham red squirrel controversy [building a telescope that threatens a subspecies of red squirrel] raises fundamental questions about whether we humans should reach for the stars without coming to know the land at our feet." (v4,#1)

Martin, Evelyn and Timothy Beatley, "Our Relationship with the Earth: Environmental Ethics in Planning Education," *Journal of Planning Education and Research* 12(1993):117-126. The results of a study of the extent to which university planning programs are contributing to new ethical relationships through the teaching of environmental ethics. Eighty-one programs were surveyed. The links between environmental ethics and environmental planning are often weaker than they can be and ought to be. Implications for planning education and recommendations for future curriculum development. The survey involves some rather sophisticated inquiry about where (in which departments) environmental ethics is and is not taught on which campuses. "Exposure to such ethical theories, concepts, and tools is as essential to the long term productivity, effectiveness, and relevance of planners as are the more conventional skills-based courses," Martin is with the Center for Respect of Life and Environment, a division of the Humane Society of the United States; Beatley is chair of the Department of Urban and Environmental Planning at the University of Virginia. Also involved is Bruce K. Ferguson, Landscape Architecture, University of Georgia. This study was also the subject of panels at the Annual conference, Council of Educators in Landscape Architecture, Charlottesville, VA, October 17-20, 1992 and at the Association of Collegiate Schools of Planning, Columbus, OH, October 30-November 1, 1992. Those interested in further information and in the Land Ethics program are invited to contact Evelyn Martin, Center for Respect of Life and Environment, 2100 L Street, N.W., Washington, DC 20037. Phone 703/329-3320. (v4,#1)


Martin, John N. "The Concept of the Irreplaceable." *Environmental Ethics* 1(1979):31-48. An analysis is proposed for the common argument that something should be preserved because it is irreplaceable. The argument is shown to depend on modal elements in irreplaceable, existence assumptions of preserve, and the logic of obligation. In terms of this theory it is argued that utilitarianism can account for most, but not all instances of persuasive appeals to irreplaceability. Being essentially backwards looking, utilitarianism cannot in principle justify preservation of objects irreplaceable because of their history or genesis. Martin is in the philosophy department, University of Cincinnati, Cincinnati, OH. (EE)

Martin, John N. "Order Theoretic Properties of Holistic Ethical Theories." *Environmental Ethics* 13(1991):215-34. Using concepts from abstract algebra and type theory, I analyze the structural presuppositions of any holistic ethical theory. This study is motivated by such recent holistic theories in environmental ethics as Aldo Leopold's land ethic, James E. Lovelock's Gaia hypothesis, Arne Naess' deep ecology, and various aesthetic ethics of the sublime. I also discuss the holistic and type theoretic assumptions of such standard ethical theories as hedonism, natural rights theory, utilitarianism, Rawls' difference principle, and fascism. I argue that although there are several common senses of part-whole in ethical theory, the central sense of holism in ethics is that of a theory that defines its key moral idea as an emergent group property grounded in the relational properties of its individual constituents. Hedonism and Kantianism do not count as holistic in this sense. Natural rights theory does in a degenerate way. Utilitarianism and various environmental ethics are paradigm examples. I point out as a general structural weakness of environmental holistic theories that their first-order grounding in nonmoral vocabulary seems to preclude an explanation of many moral intuitions about human ethics. Martin is in the philosophy department, University of Cincinnati, Cincinnati, OH. (EE)


Martin, Michael, "Ecosabotage and Civil Disobedience," *Environmental Ethics* 12(1990):291-310. One of the few analyses of the morality of ecosabotage. Martin discusses the relationship between ecosabotage and civil disobedience, with the crucial distinction that civil disobedience is a public act, while ecosabotage is not. There are no general arguments against ecosabotage, but there are also no specific justifications for it. Martin argues on utilitarian grounds and ignores (generally) the non-anthropocentric value systems of most ecosaboteurs. But it is the radicalism of the goal---a non-anthropocentric ethic---that requires the disobedient action. (Katz, Bibl # 2)

Martin, Michael. "Ecosabotage and Civil Disobedience." *Environmental Ethics* 12(1990):291-310. I define ecosabotage and relate this definition to several well-known analyses of civil disobedience. I show that ecosabotage cannot be reduced to a form of civil disobedience unless the definition of civil disobedience is expanded. I suggest that ecosabotage and civil disobedience are special cases of the more general concept of conscientious wrongdoing. Although ecosabotage cannot be considered a form of civil disobedience on the basis of the standard analysis of this concept, the civil disobedience literature can provide important insights into the justification of ecosabotage. First, traditional appeals to a higher law in justifying ecosabotage are no more successful than they are in justifying civil disobedience. Second, utilitarian justifications of ecosabotage are promising. At present there is no a priori reason to suppose that some acts of ecosabotage could not be justified on utilitarian grounds, although such ecosaboteurs as Dave Foreman have not provided a full justification of its use in concrete cases. Martin is in the philosophy department, Boston University, Boston, MA. (EE)
North America lost most of its large mammals near the close of the last ice age: mastodons, mammoths, giant ground sloths, car-sized glyptodonts, rhino-sized marsupials, giant kangaroos, gorilla-sized lemurs. Martin is an enthusiastic advocate of "blitzkreig," that nearly arrived humans rapidly killed off naive prey unfamiliar with this new predator. (Others find few such kill sites, are less sure how when and how rapidly humans invaded the Americas, and doubt that prey species stay naive very long.) Since humans were a leading cause of such extinctions, Martin also argues that where such species still exist elsewhere, they should be restored to North America (and Eurasia) in Quaternary parks filled with wild horses, camels, elephants, lions, and cheetahs.

Martin, Paul S., and Szuter, Christine R., "War Zones and Game Sinks in Lewis and Clark's West," Conservation Biology, February 1999. Native American warfare’s unnatural ecological effects. The number and distribution of bison and other big animals was likely determined by the presence of buffer zones between warring Native tribes. In an individual tribe's homeland, populations of bison and elk were often in serious decline. But in the war zones between tribes, where hunters seldom went, these animals flourished. The conclusion, say these most recent advocates of this "war zone theory," is that the scarcity or abundance of large animals seen by the Lewis and Clark expedition was not "truly natural, that is, falling outside human influence or control. ... The West in the time of Lewis and Clark was long past any purely 'natural condition' that might serve as an absolute benchmark for planners." One of the study's authors--an advocate of the "blitzkrieg" theory that newly arrived human hunters drove North America's megafauna such as mammoths and mastodons extinct some 13,000 years ago--suggests conservationists might want to restore pre-Native American nature preserves by importing elephants who would mimic the extinct megafauna. See also Stevens, W. K., "Unlikely Tool for Species Preservation: Warfare," New York Times, 3/30/99. (v.10,#2)


Martin, Thomas E. and Finch, Deborah M., eds., Ecology and Management of Neotropical Migratory Birds: A Synthesis and Review of Critical Issues. New York: Oxford University Press, 1995. $28.00 paper $52.00 cloth. 512 pages. The apparent decline in numbers among many species of migratory songbirds is a timely subject in conservation biology, particularly for ornithologists, ecologists, and wildlife managers. This book is an attempt to discuss the problem in full scope. It presents an ambitious, comprehensive assessment of the current status of neotropical migratory birds in the U.S., and the methods and strategies used to conserve migrant populations. Each chapter is an essay reviewing and assessing the trend from a different viewpoint, all written by leaders in the fields of ornithology, conservation, and population biology. Thomas E. Martin is from University of Montana, and Deborah M. Finch is from USDA Forest Service, Arizona. (v7,#1)


Martin, Vance, Tyler, Nicholas, eds. Arctic Wilderness--The 5th World Wilderness Congress. Ojai, California: The WILD Foundation, Nov. 1995. $32. The aim of the 5th WWC was to enhance awareness of the natural beauty, natural resources, and the aesthetic and scientific importance of the Arctic and Antarctica. Examples of discoveries and developments in both basic and applied science, of exploitation of renewable and nonrenewable natural resources, and of new information discovered. There are clear warnings about the consequences of human activity at high latitudes. (v7,#4)
Martin, Vance C., and Alan Watson, "International Wilderness." In Hendee, John C. and Chad P. Dawson, Wilderness Management: Stewardship and Protection of Resources and Values. 3rd ed. Fulcrum Publishing, 2002. Internationally "there is increasing acceptance of the term [wilderness] to mean those areas legislated or zoned for protection in their natural condition, [yet] accommodating a wider spectrum of human activity than the U.S. definition might allow." (v. 15, # 3)

Martin, Vance G., "Australia's Wilderness Movement--Gathering Momentum," International Journal of Wilderness 2, no. 1 (May 1996):10-14. Australia's wilderness movement emphasizes some uniquely Australian features, on a continent as large as the United States but with 10% of the U.S. population, largely semiarid or arid, but with rainforest as well and with an unusual fauna and flora. Designation is principally at the state level, and increasingly recognizes the histories of the aboriginal peoples. Good summary of political and philosophical issues, as well as of designated areas. Martin is with the International Center for Earth Concerns and the WILD foundation, Ojai, CA. (v7,#2)


Martin, Paul S., and Christine R. Szuter. A War Zones and Game Sinks in Lewis and Clark's West. Conservation Biology Vol. 13, no. 1 (1999): 36-45. Native Americans often over-hunted their lands, and the most abundant game was often in the contested territories between tribes, where they were reluctant to hunt. In the absence of Native Americans, bison, elk, deer, and wolf populations would have been larger. With evidence from the Lewis and Clark journals.


A warming for the local communities and the State Government of Chihuahua, Mexico, about the possible adverse consequences of ecotourism. There are negative impacts on the Tarahumara indigenous peoples and on the environment in the Copper Canyon area, and such impacts are typical of many others elsewhere around the globe. Ecotourism needs careful regulation if its benefits are to be realized. Martinez also read a paper at the South West Texas and New Mexico Philosophical Society, El Paso, Texas, in April 1998, "Bringing Environmental Ethics down to Earth," arguing that grand theories in environmental ethics are not particularly helpful in solving the on-the-ground problems of ecotourism. Martinez is a Mexican philosopher, who has recently completed a master's degree in the philosophy of environment and development at Colorado State University. (v.9,#3)


Martinez-Alier (Martinez-Alier), J., "Distributional Obstacles to International Environmental Policy: The Failures at Rio and Prospects after Rio." Environmental Values Vol.2 No.2(1993):97-124. ABSTRACT: The concept of 'sustainable development' as used by the Brundtland Commission was meant to separate environmental policy from distributional conflicts. Increases in income sometimes are beneficial for the environment (for instance, they allow the use of domestic cooking fuels which in some ways are less damaging to the environment), but higher incomes have meant higher emissions of greenhouse gases, and higher rates of genetic erosion. In the
aftermath of the Rio conference of June 1992, this article analyses some unavoidable links between distributional conflicts and environmental policy. Often, environmental movements have tried to keep environmental resources and services outside the market, but there are now attempts to establish property rights on, and to give money values to, environmental resources and services, such as agricultural genetic resources and the CO2 absorption facility provided by the oceans and new vegetation. European `green' proposals to impose an `eco-tax,' and proposals from India to create a world market for CO2 emission permits are considered. The issue raised by the growing Third World agroecology movement, of payment of `farmers' rights' for in situ agricultural biodiversity is discussed. The article includes a short discussion of the North American free trade agreement (NAFTA) between Mexico and the USA, in so far as it involves so-called `ecological dumping,' i.e. trading at values which do not include environmental costs. In the last sections, the article asks how prices in ecologically-extended markets would be formed, how much such prices will depend on distribution, and how much (or how little) such payments would change distribution of income. Environmental movements of the Poor are faced with the dilemma of keeping environmental resources and services out of the market, or else asking for property rights to be placed on them. KEYWORDS: property rights, environmental movements, greenhouse effect, agricultural biodiversity, environmental policy, poverty and environment, ecological debt. Universitat Autonoma, Barcelona 08193, Spain.

Martinschramm, (Martin-Schramm), James B., Population, Consumption, and Ecojustice: Challenges for Christian Conceptions of Environmental Ethics, Union Theological Seminary, New York, Ph.D. thesis. 314 pages. Four moral norms that have been proposed as the foundation for an ethic of ecojustice (sustainability, sufficiency, participation, and solidarity) are applied to the problems posed by unsustainable patterns of human production, consumption, and reproduction. An examination of the ecological, theological, and moral challenges posed by population growth and overconsumption. A constructive ethic of ecojustice and a critique of the 1994 United Nations World Plan of Action on World Population. An assessment of five important theologians: James Nash, Sallie McFague, John Cobb, Jr., Rosemary Radford Ruether, and Leonardo Boff. An adequate ethic of ecojustice must emphasize the reciprocal relationship of ecological integrity and social justice and must offer not only sound theological grounding but also specific ethical guidance toward policy formulation. The advisor was Larry Rasmussen. (v.10,#1)


Marvin, E. Olsen, Dora G. Lodwick, and Riley E. Dunlap. Viewing the World Ecologically. Boulder, CO: Westview Press, 1992. 214 pp. $28.00 paper. The authors use surveys to look at how strongly society adheres to the prevailing paradigm of the twentieth century, the technological social paradigm of the industrial period, compared with a shift to a sustainable
development paradigm. Many persons hold attitudes that relate to both paradigms. Most of the data are about a decade old. (v6,#1)

Marx, Leo. The Report from the Institute for Philosophy and Public Policy, vol. 10, no.3/4, Summer/Fall 1990. "Post-Modernism and the Environmental Crisis." "There may be more than coincidence involved in the simultaneous discovery of the global and social nature of environmental degradation and the skeptical, anti-foundationist drift of contemporary philosophy and critical theory." (v2,#2)


Marzluff, John, and Hamel, Nathalie, "Land-Use Issues," Encyclopedia of Biodiversity 3: 659-674. Land use issues concern the processes by which human activities determine land cover. Important issues are agricultural development and intensification, settlement, and extraction of natural resources. In response to human land use, the earth's land cover has changed from a mosaic of native woodlands, forests, and grasslands to an increasingly impacted mixture of degraded and fragmented native habitats, exotic croplands, and impervious urban surfaces. In the last three centuries, models suggest that forests have declined 19%, grasslands have declined 8%, and cropland has increased over 400%. This article discusses how land use processes have changed through time and how they have caused the natural pattern of land cover to change. This transformation of the planet's landscape is widely recognized as the primary driver in the current global loss of biodiversity. Several examples of how land use can influence biodiversity are also considered. (v.11,#4)

Marzluff, John M., and Tony Angell, In the Company of Crows and Ravens. New Haven: Yale University Press, 2005. The authors claim there is much culture in crows and raven, where culture means "socially transmitted behavior patterns," also that "to know the crow is to know ourselves," partly because humans have so long and so often interacted with corvids. Marzluff is a wildlife biologist at the University of Washington; Angell is an artist and writer from the San Juan Islands of Washington.


Mase, Hiromasa. Keio University, Japan, "Nature and Ethics: Whiteheadian Approach," Annals of the Japan Association for Philosophy of Science (Tokoyo) 7(March, 1988):155-161. Argues for an environmental ethics based on intrinsic value in nature, using a Whiteheadian philosophy, with some attention to Aldo Leopold. A key category is "experience" in the Whiteheadian sense. (v1,#2)

Mase, Hiromasa, "Ecophilosophy as Liberal Arts Philosophy," Philosophical Inquiry 11(nos. 1-2, Winter-Spring 1989):28-36. "Confronted with today's ecological problems, basically what we are seeking is the ecological attitude, 'we, as a part, also live for the whole'. ... 'Mankind bears a moral responsibility for the world of the future, and also for the whole of nature'" (p. 34). Mase is at Keio University, Tokyo.

Maser, Chris, *The Redesigned Forest*. San Pedro: R. & E. Miles, 1988. P., xx, 234. Maser is a former employee of the Bureau of Land Management, a zoologist and expert on forest ecology. This book is an argument for a more enlightened policy of sustainable forestry. Maser criticizes current philosophical attitudes to forestry, the so-called "plantation mentality," but his alternative of sustainable forest management is still locked into an overly mechanistic and anthropocentric conception of nature. "We need to learn to see the forest as the factory that produces raw materials...for a common goal...a sustainable forest for a sustainable industry for a sustainable environment for a sustainable human population" (pp. 148-149). A good example of the limitations of "resource environmentalism."

Maser, Chris, *Sustainable Forestry: Philosophy, Science, and Economics*. Delray Beach, FL: St. Lucie Press, 1994. 373 pages. $ 39.95. Maser dislikes intensive forestry and proposes policies that would lead to lower, although probably more sustainable, harvest levels. He recognizes the legitimate role humans play in ecosystems and is concerned for the protection of scarce resources such as old growth forestry and biodiversity; he is also concerned about the fallacy of every-increasing human populations and economic activity. Maser is a forest ecologist. (v6,#4)

Maser, Chris. *Resolving Environmental Conflict: Towards Sustainable Community Development*. Delray Beach, FL: St. Lucie Press, 1996. Maser examines notions of development sustainability, and community and the synergism of ecology, culture and economic needs that promote a healthy environment enriching the lives of all its inhabitants. (v7,#1)

Maser, Chris. *Sustainable Community Development*. Delray Beach, FL: St. Lucie Press, 1997. 280pp. $39.95 paper. Maser presents a clear picture of a community-directed process of development based on human values, active learning, shared communication and cooperation within a fluid system that becomes shared societal vision both culturally and environmentally. (v8,#1)

Masolo, D. A., *African Philosophy in Search of Identity*. Bloomington, Indiana: Indiana University Press, 1994, and Edinburgh: Edinburgh University Press, 1994. Is there an African philosophy? A Kenyan philosopher analyzes this debate, its history and current status. African thinkers have used philosophy as the primary vehicle for theoretical articulation of their identities as the means for contesting identities imposed by outsiders. Among the philosophers studied is H. Odera Oruka, who has an interest in environmental philosophy. African philosophy has grown out of unique cultural circumstances and now embraces many different constructions of African reality, problems, and methods of acquiring meaningful knowledge. Masolo is in philosophy at the University of Nairobi, also he has been visiting professor at Antioch College. (v6,#3)


Mason, Marianne D. "Saving the Chesapeake Bay, One Gazebo at a Time." Natural Resources & Environment 14(No. 2, Fall 1999):134-. (v10,#4)

Mason, Michael, "Democratising Nature? The Political Morality of Wilderness Preservationists," Environmental Values 6(1997):281-306. ABSTRACT: Deep ecological appeals for wilderness preservation commonly conjoin arguments for participatory land use decision-making with their central championing of natural areas protection. As an articulation of the normative meaning of participatory democracy, the discourse ethics advanced by Jürgen Habermas is employed to highlight the consistency and justifiability of this dual claim. I argue that Habermasian moral theory reveals a key tension between, on the one hand, an ethical commitment to wilderness preservation informed by deep ecological and bioregional principles that is oriented to a naturalistic value order and, on the other, the procedural norms of democratic participation. It is claimed that discourse ethics thereby raises critical philosophical and practical questions concerning the political legitimacy of deep ecology. In examining the progressive claims of environmental philosophers and wilderness activists embracing this perspective, I draw empirically upon Canadian arguments for natural areas protection and associated radical prescriptions for a democratisation of land use decision-making. School of Geography and Environmental Studies University of North London, 62-66 Highbury Grove, London, N5 2AD, UK. (EV)


Masri, Al-Hafiz B. A., Islamic Concern for Animals (Petersfield, Hants, England: The Athene Trust, 1987). The author was for many years the first Sunni Imam of the Shah Jehan mosque, Woking, United Kingdom. Includes 100 Quranic quotations and 50 from the Hadith. Dr. Masri has also produced a videotape in this field. (v2,#1)

Massey, Marshall, "Where Are Our Churches Today? A Report on the Environmental Positions of the Thirty Largest Christian Denominations in the United States," Firmament, vol. 2, no. 4, Winter, 1991. "Over 70% of all U. S. Christians are now in denominations that either have active ecology ministries or are beginning to assemble ecological ministries." Programs are underway in the United Methodist Church (3rd largest), Evangelical Lutheran Church in America (5th), Presbyterian Church (USA) (8th), United Church of Christ (14th), Christian Church (Disciples of Christ) (20th), and programs are beginning in the Catholic Church (1st), the Southern Baptist Convention (2nd), the National Baptist Convention of America (9th), the Lutheran Church--Missouri Synod (10th), the Episcopal Church (12th), American Baptist Churches USA (13th), and the Seventh-day Adventist Church (24th). The larger denominations that have taken no action are the National Baptist Convention (4th), the Church of God in Christ (Memphis, TN) (7th), and the Church of Jesus Christ of the Latter-day Saints has made a formal commitment to inaction (6th). (v2,#1)

Massinga, Antonio. "Development Dilemmas in Mozambique." The Ecologist 26(Mar.1996):73. After three decades of warfare, Mozambique is being developed as a tourist destination. While
the economic returns for local people are slim, the ecological damage is often considerable. But tourism is not the only destructive industry making land grabs on Mozambique. Trapped by the current development model, many environmentalists feel forced to make invidious choices. (v7,#2)


Matczak, P., Problemy ekologiczne jako problemy społeczne (Ecological problems as Social Issues), Wydawnictwo Naukowe UAM (UAM Press), Poznań, 2000. (v.13,#1)

Matheny, Gaverick, and Kai M. A. Chan, "Human Diets and Animal Welfare: The Illogic of the Larder," Journal of Agricultural and Environmental Ethics 18(2005):579-594. Few moral arguments have been made against vegetarian diets. One exception is the Logic of the Larder: We do animals a favor by purchasing their meat, eggs, and milk, for if we did not purchase these products, fewer animals would exist. This argument fails because many farm animals have lives that are probably not worth living, while others prevent a significant number of wild animals from existing. Even if this were not so, the purchase of animal products uses resources that could otherwise be used to bring a much greater number of animals into existence. Keywords: animal welfare - farm animals - utilitarianism - vegetarianism - wildlife. Matheny is in the Department of Agricultural and Resource Economics, University of Maryland. Chan is with the Center for Conservation Biology, Stanford University, also with the Institute for Resources Environment and Sustainability, University of British Columbia. (JAEE)

Matheny, Gaverick, "Least harm: A defense of vegetarianism from Steven Davis's omnivorous proposal." Journal of Agricultural and Environmental Ethics 16(2003):505-511. Steven Davis argues that the number of animals killed in ruminant-pasture production is less than the number of animals killed in crop production. Davis then concludes the adoption of an omnivorous diet would cause less harm than the adoption of a vegetarian diet. Davis's argument fails on three counts: first, Davis makes a mathematical error in using total rather than per capita estimates of animals killed; second, he focuses on the number of animals killed in production and ignores the welfare of these animals; and third, he does not count the number of animals who may be prevented from existing. KEY WORDS: animal production, animal rights, animal welfare, least harm, population, utilitarianism, vegetarianism. (JAEE)


be called "temperament," but these authors find they are similar to dimensions of personality in humans. Some octopuses they call "aggressive," others "indifferent," and some "paranoid."

Mathews, David Ralph. "Common versus Open Access: The Canadian Experience," The Ecologist 25(no.2/3, Mar. 1995):86-. Government fisheries policy in Canada has been heavily influenced by the "Tragedy of the Commons' thesis-with disastrous results; the regulated commons; Discrimination and redundancies; opening up access for industrial trawlers; Local resistance. (v6,#4)

Mathews, Freya, The Ecological Self. London: Routledge, 1990, published in the United States by Barnes and Noble, Savage, Maryland, 1991. Mathews claims here the first book-length treatment of the metaphysical foundations of ecological ethics. The author seeks to provide a metaphysical illumination of the fundamental ecological intuition that we are in some sense "one with" nature and that everything is connected to everything else. She considers and rejects the dominant atomistic metaphysics implicit in Newtonian physics. Drawing on Einsteinian cosmology, modern systems theory, and the philosophy of Spinoza, she elaborates a new metaphysics of interconnectedness. The normative implications of this new metaphysics for our conceptions of nature and the self are analyzed in this provocative study. (v2,#3)


Mathews, Freya, For Love of Matter: A Contemporary Panpsychism. Albany: State University of New York Press, 2003. "To adopt a panpsychist outlook is to enter the terrain of `spirituality,' since it opens up this possibility of communicative engagement with a responsive world that invites us to assume an attitude of eros in relation to it. In considering this invitation however, we are immediately confronted with the traditional problem of evil: why should we make ourselves available and vulnerable to a world that can and does visit so much suffering and harm upon us? How can we affirm the erotic intent of the One in creating us, in the light of the tortured testimony of the created?" (p. 10). A useful account is the story of Eros and Psyche, recorded by Lucius Apuleius in the second century A.D. "This story reveals how it is possible to sustain an erotic engagement with the world, consonant with a panpsychist outlook, in full knowledge of the possibilities of suffering and death that this world holds for us" (p. 10). Mathews is in philosophy, La Trobe University, Australia.

Mathews, Freya, "Conservation and Self-Realization: A Deep Ecology Perspective," Environmental Ethics 10(1988):347-355. An excellent discussion of the basic tenets of deep ecology---self-realization and identification with the wider world---and the apparent dilemma this creates for conservation policies. Deep ecology assumes that "identification" with nature leads to conservation as a matter of self-defense, but if nature as a whole would continue without humanity, why is it important to conserve for the survival of humanity? Mathews argues that "identification, in the context of deep ecology, is premised on a convergence of interests" (p. 353). An individual's interests lead to a wider identification; but one cannot then nullify the more local concerns for the sake of more cosmic ones. Mathews also bases the argument on the unargued claim that the universe as a whole is a self-realizing entity, endowed with conatus. Cosmic identification does seem to "lose" the individual. Mathews ends by saying that the loss of
life on Earth can be viewed with equanimity, but this is a strange way to argue for environmentalism. (Katz, Bibl # 2)


Mathews, Freya, "Beyond Modernity and Tradition: A Third Way for Development," Ethics and the Environment 11(2006):85-113. How we understand the world (our metaphysical premise) determines, to a large degree, how we treat it. How we treat our world constitutes our basic modality. Our basic modality colors everything we do--our entire culture takes its cue from it. Three basic modalities are here distinguished. The first is the modality of pre-materialist or traditional, religion-based societies. This is a modality of importuning, the seeking of assistance from supernatural sources. The second is the modality of materialist or modern, secular societies. This is a modality of instrumentalism, involving mastery, control, and a will to re-make the world in accordance with human ends. The third is the modality of prospective post-materialist societies. These societies would be post-religious but not post-spiritual. Their modality would be one of letting the world unfold according to its own nature, and, by extension, finding creative synergies between human and nonhuman conativities. This modality of synergy is explicated by reference to the Daoist notion of wu wei. Mathews is in philosophy, La Trobe University, Australia. (Eth&Env)

Mathews, Freya. "Conservation and Self-Realization: A Deep Ecology Perspective." Environmental Ethics 10(1988):347-55. Nature in its wider cosmic sense is not at risk from human exploitation and predation. To see life on Earth as but a local manifestation of this wider, indestructible and inexhaustible nature is to shield ourselves from despair over the fate of our Earth. But to take this wide view also appears to make interventionist political action on behalf of nature--which is to say, conservation--superfluous. If we identify with nature in its widest sense, as deep ecology prescribes, then the "self-defence" argument usually advanced by deep ecologists in support of conservation appears not to work. I argue that the need for eco-activism can be reconciled with a rejection of despair within the framework of deep ecology, and that in the process of this reconciliation the meaning of the term conservation acquires a new, spiritual dimension. Matthews is in the philosophy department, University of Melbourne, Victoria, Australia. (EE)


Mathews, Freya. For Love of Matter: A Contemporary Panpsychism. Albany, NY: SUNY Press, 2003. Challenges basic assumptions of Western science, modern philosophy, and environmental philosophy, arguing that the environmental crisis is a symptom of a larger, metaphysical crisis. Western science rests on the premise that the world is an inert backdrop to human presence rather than a communicative presence in its own right, one capable of dialogical congress with us. Mathews explores the transformative effects of a substitution of the latter, panpsychist premise for the former, materialist one. She suggests that to exist in a dialogical modality is to enter an expanded realm of eros in which the self and world are mutually kindled into a larger, more incandescent state of realization. She argues that any adequate philosophical response to the so-called "environmental crisis" cannot be encompassed within the minor discipline of environmental philosophy but must instead address the full range of existential questions. Freya Mathews is Senior Lecturer of Philosophy at La Trobe University. She is the author of The Ecological Self and editor of Ecology and Democracy. (v.14, #4)


Matthews, Anne, "Slow Death Beyond the 98th Meridian. Can Anyone Out There Save the Great Plains?" *Outside*, May 1993. Two percent of the nation live in this vast area, largely depopulated with the agricultural revolution and industrialization. The plains are overgrazed, overplowed, overfenced, and also a wheat basket. Can the plains be re-invented as an alternative to industrial, urban civilization? "We're hard-wired for the Paleolithic," says Wes Jackson. "We need less technological cleverness, more understanding." (v4,#1)


Matthews, Sue, "The IMF and the World Bank: Financial Friends or Environmental Enemies," *Africa - Environment and Wildlife* 2(no. 2, January/February, 1994):27-31. In early 1993, after a hiatus of almost 30 years, the World Bank offered to lend South Africa 3 billion rand ($ 800,000), following the new government there, and the lifting of United States and United Nations sanctions. There were detailed negotiations with the South African government and the African National Congress (ANC) party about potential projects within a social reconstruction program. The International Monetary Fund (IMF) also offered an equally large loan to help relieve the balance-of-payments strain South Africa had experienced as a result of the drought and the consequent heavy maize imports of 1992. These advances were met with jubilation on the one hand and words of warning on the other. Many critics felt it was unwise to drive South Africa further into debt, and even unnecessary, given its huge gold reserve. When World Bank President Lewis Preston visited the country, Nedbank's chief economist was quoted, "We have enough finance in this country, but we just don't know how to use it." Others were wary of accepting the World Bank and IMF loans, having seen the consequences of the debt crisis in the rest of Africa. And since both institutions are controlled by member countries whose votes are in accordance with the size of their respective donations, the United States wields the most power. Through the bank and the IMF, the United States has exerted such a strong influence over the macroeconomic policies of African nations that it has been likened to the recolonization of Africa. Particularly troublesome are Structural Adjustment Programmes (SAF's), which typically require currency devaluation to make exports cheaper and imports more expensive, spending cuts, withdrawal of subsidies, and trade liberalization, resulting in plummeting per capita incomes, rising unemployment and urban poverty, and reduced government spending on social services, also encouraging the expansion of cash crops for export at the expense of food crops which are grown for local consumption. Much of this burden of adjustment falls on the poor, especially women and children. The World Bank and IMF have been attempting reforms, but reform is difficult. Matthews is a marine ecologist and free lance journalist.


Matthiessen, Peter, "The Last Cranes of Siberia," *New Yorker*, May 3, 1993. The cranes of Russia are facing extinction amid Russia's economic anarchy, as multinational corporations and local entrepreneurs plunder the natural resources of Siberia's Amur Basin. Now environmental delegates from Russia, China, Japan, and the U.S. are putting aside national disputes in the fight to save the region's endangered species. (v4,#2)

Matthiessen, Peter. "The Last Wild Tigers." *Audubon* 99 (no. 2, March-April 1997):54-63, 122-25. There are now about 3,000 tigers in Asia, down from 100,000 at the turn of the century. Prospects for survival are not good, given the mix of escalating numbers of people, their demands on the environment, and the vicissitudes of governments in the regions the tigers inhabit. Matthiessen is a well-known wildlife conservationist. (v8,#1)

Matthiessen, Peter, *The Birds of Heaven: Travels with Cranes*. Paintings by Robert Bateman. San Francisco: North Point Press, 2001. Cranes are birds out of time and rapidly running out of space. Ancient birds, all fifteen species are in trouble, and on every continent except South America. Several species seemed doomed to extinction. Yet no other birds have as popular a
hold on the imagination of as many cultures. Matthiessen travels to China, Mongolia, India, Europe, and the United States to investigate and to lament the plight of cranes. (v.13,#1)


Mattson, David J., and Merrill, Troy, "Extirpations of Grizzly Bears in the Contiguous United States, 1850-2000," Conservation Biology 16(no. 4, August 2002):1123-1136. The Yellowstone grizzly bear owes its survival to the Endangered Species Act. The estimated 400-600 grizzlies in the greater Yellowstone ecosystem would not be there today if not for the bear's listing under the ESA a quarter-century ago. The authors use a computer model to compare population trends before and after listing, and figure in changes in land management resulting from the ESA, and conclude that, without the law, the bear would have a "one in quadrillion chance" of still existing as a viable population. Mattson is a biologist with the U.S. Geological Survey, Colorado Plateau Field Station, Northern Arizona University, Flagstaff. Merrill is an independent researcher, Moscow, ID. (v.13, #3)

Mattson, David J. "Ethics and Science in Natural Resource Agencies", Bioscience 46(no.10, 1996):767. (v.7,#4)

Maturana, Humberto R. and Francisco J. Varela, Autopoiesis and Cognition: The Realization of the Living. Dordrecht/Boston: D. Reidel Publishing Co., 1980. This book was first published in Chile as Autopoiesis: The Organization of the Living. This seems to be the origin of the recent term "autopoiesis" (autos, self, and poiein, to produce) to refer to nature and organisms as self-organizing systems, although this idea is an old one ("the earth produces of itself, Greek: automatically, Luke 4.28). More recently, the idea had already been in use in systems theory and in irreversible thermodynamics. The authors claim that organisms are self-organizing machines. A popular account is The Tree of Knowledge: The Biological Roots of Human Understanding. Boston, Shambhala, 1988.


Matzke, Jason P., A Pluralistic Humean Environmental Ethic: Dealing with the Individualism-Holism Problem, Ph.D. thesis, Michigan State University, Spring 2003. Environmental ethicists often argue for ethical holism, granting moral standing to ecosystems and species. However, this conflicts with traditional ethics which attributes moral standing to individual organisms. This is the individualism-holism problem. Marry Anne Warren and J. Baird Callicott have each offered solutions which they claim are monistic. I synthesize their views and reinterpret them as a pluralistic Humean environmental ethic, one which ameliorates but cannot fully eliminate the conflict.

Warren’s principles are revised here in light of my contention that interests play the central role in determining the moral standing of individual organisms and this provides substance to Callicott's otherwise more abstract approach. Callicott's work, in turn, provides theoretical coherence for Warren's principles.

Humean sentimentalism, however, is open to the charge of relativism, especially since Hume's appeal to universal agreement on central moral beliefs cannot be sustained in a world so obviously diverse. Humean sentimentalism can be reinterpreted pluralistically. Differences in experience and culture prevent universal agreement, but the common experience of living as humans in this world, with its particularities, limits the range of acceptable alternatives.
Furthermore, because reason informs sentiment, there are grounds for critically assessing Humean moral claims. A pluralistic approach to moral reasoning provides an alternative to the continuing theoretical and practical stalemate between individualists and holists. Choices may have ethical remainders, but neither side of a debate can so easily insist that compromise threatens their moral integrity. The thesis advisor was Fred Gifford. (v.14, #4)


Maurer, Brian A., Untangling Ecological Complexity: The Macroscopic Perspective. Chicago: University of Chicago Press, 1999. Maurer argues that ecology can and ought to study fauna and flora on regional and continental scales, often more enlightening than too much detailed study in local communities, the macroscopic scale as opposed to the microscopic scale. (v.10,#1)

Maurer, Brian A. "Relating Human Population Growth to the Loss of Biodiversity", Biodiversity Letters 3(no.1, 1996):1. (v7,#4)

Maurer, Brian A., "Ecological Science and Statistical Paradigms: At the Threshold," Science 279(1998):502-504. Ecosystems are too complicated to form testable theories about easily. Linear thinking about ecosystems--assumptions that they are "balanced" or "stable," for example--is being replaced by the view that ecosystems are constantly changing and that those changes depend to a large extent on conditions experienced by an ecosystem before its measurement. Are ecosystems predictable in dynamic change, and lawlike or regular to this extent? Not yet in many cases, since both the theory and the statistics used in analysis have been too simplistic. But they may become so with more sophisticated statistical methods. Maurer is in zoology, Brigham Young University, Provo, UT. (v9,#1)


Maxwell, Steven. "The Commercial Environmental Services Industry: Overview and Outlook." Journal of Environmental Law and Practice 3(no.4, Jan. 1996):4. Despite a shake-out among environmental companies, the need for high-quality environmental services will endure, and the forecast is optimistic. (v7,#1)


May, Elizabeth, At the Cutting Edge: The Crisis in Canada's Forests. Toronto: Key Porter Books, Ltd. Canadian $ 25.00. An analysis of what modern industrial forestry is all about, according to May, the wholesale destruction of Canada's natural heritage. Myths and half-truth perpetuated by the Forest Industry and the Canada government. (v.10,#2)


May, Peter H., da Motta, Ronaldo Seroa, eds. Pricing the Planet: Economic Analysis for Sustainable Development. New York: Columbia University Press, 1996. 192 pp. $45. Environmental economists and ecologists explore possibilities for sustainable development on a global scale. In the process they shed light on some difficult questions about how much we can expect from economic development projects as they currently stand, given the finite resources of our Earth. (v7,#4)


May, Robert M., "Taxonomy as Destiny," Nature 347 (September 13, 1990):129-130 and C. H. Daugherty, A. Cree, J. M. Hay, and M. B. Thompson, "Neglected Taxonomy and Continuing Extinctions of Tuatara (Sphenodon), Nature 347 (September 13, 1990):177-179. The tuatara is a large, iguana-like reptile, the sole survivor of a group that flourished in the Triassic Period, now confined to a few islets off the coast of New Zealand. It has a well-developed third eye in the center of its head, a variation on an organ that has been reduced to the pineal gland in most vertebrates. The authors argue that there are three species, not one, and that the established view that there is one species has resulted in inadequate conservation, with one species now extinct and the others imperiled. Further, they wonder whether these two remaining species, quite disparate from superficially similar lizards, do not by some measures represent as much diversity as in all 6,000 species of more common snakes, lizards, and amphibians. Phylogenetic distance needs to be figured into estimates of diversity and into priorities in conservation. They suggest some ways to calculate this. May is a zoologist at Oxford; Daugherty, Cree, and May are biologists at Victoria University of Wellington in New Zealand; Thompson is a zoologist at the University of Sydney in Australia. (v5,#1)

May, Robert M., "The Modern Biologist's View of Nature," pages 167-182 in Torrance, John, ed., The Concept of Nature. Oxford: Clarendon Press, 1992. "My conclusion is that humanity today does indeed have a very special place in nature, not because we were divinely created to use it and rule it, but rather because we have--for what must be a fleeting moment in evolutionary time-cast off the shackles that keep population in check, and in so doing threaten, by the continuing increase in human numbers and associated activities, to bring about the end of history in the natural world. ... I believe we should cherish and conserve diversity primarily for the ethical reason that we now recognize we are no more, though no less, than a part of it; no longer can an educated person see the world as a God-given inheritance to wreak to human ends" (p.168, p. 182). May is in zoology, Oxford University. (v.10,#1)

May, Gerald G. The Wisdom of Wilderness: Experiencing the Healing Power of Nature. San Francisco: HarperSanFrancisco, 2006. The healing power of nature in diverse ranges of experiences, written when the author knew he was dying. By a psychiatrist who served as a medic in Vietnam, founding a Christian contemplative organization with insights from Eastern traditions. Before we can effectively heal the wounds we have inflicted upon the rest of
Nature, we must allow ourselves to be healed. And we must allow the rest of Nature to help us.

Mayer, Sue, and Stirling, Andy, "Finding a Precautionary Approach to Technological Developments - Lessons for the Evaluation of GM Crops," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):57-71. The introduction of genetically modified (GM) crops and foods into Europe has generated considerable controversy. Despite a risk assessment system that is intended to be precautionary in nature, the decisions that have been taken have not gathered public confidence. Key attributes of a precautionary appraisal system include humility, completeness, assessing benefits and justifications, making comparisons, allowing for public participation, transparency, diversity, and the "mapping" of alternative views rather than the prescription of single solutions. A comparison of the European GM regulatory system with a different (more precautionary) approach using a "multi-criteria mapping" technique reveals a number of problems. These include the narrow framing of the established risk assessment system (thereby excluding many issues of public concern), a lack of public involvement in the process, and a failure to include appropriate comparisons or a diversity of options. Recent changes to the European regulatory system only go part of the way to addressing these issues. Further controversy may therefore be expected. However, practical ways of undertaking a more broad-based precautionary approach are now available (including the multi-criteria mapping method). These new approaches to technology assessment offer a means for decision making to earn greater public confidence in this complex and difficult area. KEY WORDS: GMO, genetically modified crops, multi-criteria mapping, precautionary principle, risk assessment, technology assessment. Mayer is with GeneWatch UK, Tideswell, Buxton, Derbyshire, UK. Stirling is with Science and Technology Policy Research, University of Sussex, Brighton, UK. (JAEE)


Mayo, Deborah G., and Rachelle Hollander, eds., Acceptable Evidence: Science and Values in Risk Management. New York: Oxford University Press, 1991, paper edition, 1994. 304 pages. $19.95. "This volume shows that rational, critical approaches to value-laden risk judgments can be fruitful, making possible more sophisticated risk assessments and risk management that better comprehends the values at stake." - Ethics. Now in paper and complimentary examination copies are available. Mayo teaches philosophy at Virginia Polytechnic Institute and Hollander is coordinator for Ethics and Values Studies at the National Science Foundation. (v5,#1)


part of a rhythmic flow with the rest of the planet. How can we decide how to treat the animals around us when we fail to realize the nature of our kinship with them. Without hearing the voices of the earth, rocks, and ocean waves, how can we dialogue with the planet or understand ourselves. What kind of ethics would help us find a moral way to achieve an inclusive global community and cherish the environment? Mazis is professor of humanities and philosophy at Soka University and also Associate Professor of humanities and philosophy at Penn State at Harrisburg. (v.13,#2)


Mazzotta, Marisa J. and Kline, Jeffrey, "Environmental Philosophy and the Concept of Nonuse Value," Land Economics 71 (no. 2, 1995):244-249. Economists have hotly debated nonuse values, whether they are measurable, and whether they should be included in environmental decision-making. It is important to consider the possibility that many individuals may view nonmarket valuation as irrelevant to the more fundamental issue of whether humans have obligations to nature beyond purely anthropocentric concerns. Philosophical questions are at least as important to consider as methodological questions. The debate over nonuse values can be enriched by considering different environmental philosophies. This is a challenge for economists, but if resource economists broader their anthropocentric perspective to encompass nonanthropocentric environmental philosophies, they may find that many of the methodological problems associated with defining and measuring nonuse values will be cast in a new light. Mazzotta and Kline are in Resource Economics, University of Rhode Island, Kingston. (v.10,#1)

Mc. All Mc's should also be searched under Mac in exact alphabetical order.

McAuliffe, Dennis, "Snowmobilers Could Shift Into Park Again," Washington Post (2/15/02): A3. Gatekeepers in Yellowstone wear gas masks. West Yellowstone, Montana bills itself as the "Snowmobile Capital of the World." At the entrance to the park just outside of the city, National Park employees are wearing gas masks to ward off headaches, dizziness, and nausea from the fumes of the snowmobiler entering the park. Says one gatekeeper: "It's a nightmare. It's chaos. It's loud. It's smells. It's dangerous. . . . It's just too much. The roads can't handle it. The animals can't handle it. We can't handle it." Under the Clinton Administration, the Park Service had ordered snowmobiles phased out of Yellowstone by the winter of 2003-2004. The only vehicles that would then be allowed in the Park in the winter would be snow coaches--minivans on skis and tank-like treads--that carry 12 passengers. But after a lawsuit filed by a snowmobiler manufacturer's association, the Bush Administration has reopened the decision and is considering a compromise proposal that would allow a reduced number of snowmobiles in the park each day and would require new stringent emissions for the vehicles. To meet these requirements, snowmobilers would have to ride new, cleaner and quieter machines with four-stroke engines instead of the two-stroke engines common today. Two-stroke snowmobiles have engines comparable in noise and emissions to law-mower motors. Four-stroke snowmobiles are quiet enough that you can talk in their presence. Some prefer them to the snow coaches, which although they reduce pollution by carrying multiple passengers, are incredibly noisy (ear plugs are provided for passengers who ride in them). After seeing the new quieter snowmobiles, some Park Service employees are saying they can live with them. McAvoy, Leo H. and Daniel L. Dustin."Toward Environmental Eolithism." Environmental Ethics 6(1984):161-66. We apply two contrasting principles of human workmanship, the principles of design and eolithism, to the issue of responsible environmental stewardship. Both principles are described and analyzed in an environmental context with an emphasis on the weaknesses of the more popular design principle and the strengths of the lesser known eolithic principle. We
conclude with a discussion of the principles’ complementary potential for environmental planning and management. McAvoy is at the Division of Recreation, Park and Leisure Studies, University of Minnesota, Minneapolis, MN. Dustin is at the department of Recreation, San Diego State University, San Diego, CA. (EE)

McAvoy, Leo H., and Daniel L. Dustin. "The Decline and Fall of Quality Recreation Opportunities and Environments?" Environmental Ethics 4(1982):49-57. User satisfaction as the ultimate goal of recreation planning and management is contested by a discussion of human adaptability which makes it possible for people to adjust to a progressively lower quality of recreation opportunities without loss of satisfaction. Recreation planning and management based on such satisfaction levels are then shown to perpetuate a deterioration in the quality of recreation environments themselves. To arrest this trend, a new goal for recreation planning and management is proposed based on the equation of quality of opportunity with diversity of environmental settings. The article concludes with a discussion of this goal in light of the Recreation Opportunity Spectrum (ROS) concept developed recently by members of the United States Forest Service. McAvoy is at the Division of Recreation, Park and Leisure Studies, University of Minnesota, Minneapolis, MN. Dustin is at the department of Recreation, San Diego University, San Diego, CA. (EE)

McAvoy, Leo H. "Hardening National Parks." Environmental Ethics 2(1980):39-44. The "tragedy of the commons" argument developed by Garrett Hardin is applied to problems associated with the increasing use of the national parks in the United States. The relevance of his argument to such problems is illustrated by a discussion of the proposals included in the recent Draft General Management Plan for Yosemite National Park. Implications for the future management of Yosemite and other public recreation resources conclude the article. McAvoy is at the Division of Recreation, Park and Leisure Studies, University of Minnesota, Minneapolis, MN.

McAvoy, Leo H. and Dustin, Daniel L., "The Right to Risk in Wilderness," Journal of Forestry 79(no. 3, 1981):150-152. Outdoor recreation opportunities ought to be expanded to include "no-rescue" wilderness areas in which users would bear sole responsibility for their personal welfare. Some wilderness enthusiasts want the challenge of being totally on their own, and they have this right. Agencies managing areas designated as full-risk would be absolved, indeed prohibited, from intervening at any time on behalf of any recreationist in distress. With comment by J. Alan Wagar.


McCabe, Robert A. Aldo Leopold: The Professor. Madison, WI: Rusty Rock Press, 1987. ISBN 0-910122-98-9 (Rusty Rock Press, Attn: Pam Starr, Department of Wildlife Ecology, University of Wisconsin, 1630 Linden Dr., Madison, WI 53706). $29.95 hardbound, plus $2.50 shipping. McCabe took up the professorial reins in the University of Wisconsin Department of Wildlife Ecology when Leopold died and remained in the department until he retired about 1986, and continued to hold an office there until his death about two years ago. McCabe has collected and his recollections about Leopold. Sections on Leopold's department, Leopold as a teacher, personal and professional interactions, the shack, Leopold as a scientist, commissioner, hunter, writer, and the end of his life. (Thanks to Curt Meine.)


McCaffrey S., "Thinking of Wildfire as a Natural Hazard," Society and Natural Resources 17(no.6, July 2004):509-516(8). (v. 15, # 3)

McCagney, Nancy, Religion and Ecology. Oxford: Blackwell's, 1999. 288 pages. Humans in common need a healthy environment, and a cross-cultural dialogue about environmental values will facilitate shared values and the re-evaluation of environmentally destructive practices. Science and religion must work together in mutual respect. McCagney is at the University of Delaware. (v.11,#1)


McCarthy, Elaine, Yearley, Steven. "The Irish Environmental Protection Agency: The Early Years." Environmental Politics 4(Winter 1995):257. (v7,#2)


McClanahan, T. R., and Young, Truman P. East African Ecosystems and Their Conservation. New York: Oxford University Press, 1996. 480pp. $70. Draws on the expertise of leading ecologists, each intimately familiar with a particular set of East African ecosystems, to provide an in-depth and integrated account of the ecology, management, threats, and conservation of these diverse ecosystems. Each chapter analyzes a given ecosystem type, taking the reader through the basics of its ecology, its historical use (and misuse) by humans, and its prospects for conservation. (v8,#1)


McClintock, Jack. "Peter the Great," *Discover*, October 1999, pp. 80-87. Profile of Peter Raven, Missouri Botanical Gardens, one of the half dozen most effective conservationists in the world. (v.11,#1)


McCloskey, H. J., *Ecological Ethics and Politics*. Totowa, New Jersey: Rowman and Littlefield, 1983. P. 167. This book attempts too much and ends up saying too little. Divided into three parts, it examines the scientific, ethical, and political dimensions of the environmental crisis. In Part I, McCloskey dismisses scientific predictions of ecological disaster because they are based on projections--assumptions that present trends will continue unchanged. In Part II, McCloskey argues for a human-based ethical theory, modelled on W. D. Ross, rather than for a new ecological or nonanthropological ethic. But the position seems a muddle, for he claims (p. 36) that nonhuman natural objects can have great intrinsic value. Later, he seems to confuse intrinsic with instrumental value, for species that are ugly or harmful to man are denied the value necessary for protection (p. 61). But if human use is the criterion for protection, then there are only prudential limits on mankind's use/destruction of the natural environment. Perhaps the best part of the book is Part III, where McCloskey argues for international political solutions to the ecological crisis. Many readers, however, may find too sanguine his faith in Western liberalism. (Katz, Bibl # 1)


McCloskey, Michael, "Local Communities and the Management of Public Forests," *Ecology Law Quarterly* 25(No.4, 1999):624-. (v.10,#2)


McComas, LA; Shanahan, J; Butler, JS, "Environmental Content in Prime-Time Network TV's Non-News Entertainment and Fictional Programs," *Society and Natural Resources* 14(no. 6, 2001):533-542. (v.13,#1)

McConkey, Edwin H. and Ajit Varki, "Thoughts on the Future of Great Ape Research," *Science* 309(2 Sept. 2005):1499-1501. After the sequencing of both the human and the chimpanzee genomes, "can we now provide a DNA-based answer to the fascinating question, 'What makes us human?' Not at all! Comparison of the human and chimpanzee genomes has not yet offered any major insights into the genetic elements that underlie bipedal locomotion, a big brain, linguistic abilities, elaborated abstract thought, or any other unique aspect of the human phenome." Some
McConkey is in molecular, cellular and developmental biology, University of Colorado, Boulder.

McConnell, W. J., "Madagascar: Emerald Isle or Paradise Lost?," Environment 44(no.8, 2002): 10-23. (v.13,#4)


McCormick, William, "Antoine Roquetin and `The Adulterous Woman': Reading Sartre and Camus on Nature." Manuscript paper. Antoine Roquetin is the diarist in Nausea. Sartre thought of it as his goal "to rescue the entire [human] species from animality." He looked in the mirror one day and found out what he "had always known: I was horribly natural." "The Adulterous Woman" is one of Camus' short stories revealing an attitude toward nature. In contrast with Sartre, Camus had great respect for nature; he believed that "the earth is our common homeland," and "the body is our common bond." Copies from the author: P. O. Box 1729, Charlottesville, VA 22902-1729. (v6,#4)

McCormick, Bill. "SimEve Meets OncoMouse." Real WORLD (Spring 1997): 12-13. An entertaining review of works by Donna Haraway (University of California at Santa Cruz), including her book with the unwieldy title (in cyber-jargon) Modest*Witness@Second*Millennium.FemaleMan*Meets*OncoMouse, and her video, Donna Haraway Reads the National Geographics of Primates. After wading hip-deep in deconstruction jargon, which was inspired by Derrida and has been typified by square brackets, as in [eco]logic, whereby you can both use a word and deny it, we may now have to wade, up to our necks, in academic cyber-jargon. Or, perhaps, you can avoid stepping in. Computer-generated signifiers used by Haraway include trademark, copyright, and other signs. So Nature becomes Nature, trademarked; Earth becomes SimEarth, sim for simulated. Haraway has been praised by William Cronin in Uncommon Ground and by Michael Zimmerman in Contesting Earth's Future. Although he says he's torn between laughing and crying, McCormick, nevertheless, thinks that David Lehman's indelible phrase describes Haraway's work: it "gives bullshit a bad name." (v8,#3)

McCormick. Bill. "The Island of Dr. Haraway." Environmental Ethics 22(2000):409-418. Donna Haraway's cyberfeminism has shown considerable appeal on an interdisciplinary level. Her basic premise is that by the end of the twentieth century the boundary between humans and machines has become increasingly porous, and, whether we acknowledge it or not, we are already cyborgs. She also posits this cyborg identity as an acceptable emblem for progressive politics. I disagree, and cite such writers as Susan Bordo, Sharona Ben-Tov, and Jhan Hochman to highlight some of the weaknesses of her position. I argue that we have had repeated warnings about implications of yoking the human to the machine, and that Haraway's "promising monsters" are anything but promising. (EE)


McCullough, Edwin R.  "Through the Eye of a Needle: The Earth's Hard Passage Back to Health."  

McCullough, Dale, "North American Deer Ecology: Fifty Years Later." Pages 115-122 in Tanner, Thomas, ed., *Aldo Leopold: The Man and His Legacy* (Ankeny, Iowa: Soil Conservation Society of America, 1987). Includes the controversy over deer management on Angel Island in the San Francisco Bay. The state of California tried both relocating deer and birth control implants, under pressure from the San Francisco Society for the Prevention of Cruelty to Animals. 85% of relocated deer died within one year of relocation. The Society was unable to trap and implant enough females to prevent continued population growth. "The alternatives to shooting for control of deer populations are expensive, ineffective, and not particularly humane." (p. 121).

McCullough teaches wildlife management at Berkeley.

McCully, Patrick.  *Silenced Rivers: The Ecology and Politics of Large Dams.* Atlantic Highlands, NJ: Humanities Press, Zed Books, 1996. The history and politics of dam building world wide and why large dams have become the most controversial of technologies. The wide-ranging ecological impacts of dams, the human consequences of these impacts, and the extensive technical, safety and economic problems which afflict the technology are described through numerous case studies. (v7,#1)

McCutcheon, Marc, *The Beast in You: Activities and Questions to Explore Evolution.* Charlotte, VT: Williamson Publishing Co., 1999. ISBN 1-885593-36-8. A book for kids, explaining the beast inside them. "Look in a mirror. What do you see? (Besides one handsome kid!) Look closely. See a beast? No, of course not. Look again. See parts of a beast? Hmm. Smile. There's one! Hold up your fingers. There's another! Wiggle your ears. There's another! Would you believe that whenever you are afraid or angry, an ancient beast springs into action? Yet it also lies quietly with you when you sleep. Sometimes the beast is warm and fuzzy. But sometimes it is as ferocious as a lion. Who is this weird creature, and why can only remnants, or parts, of it be seen? Where did the beast come from in the first place? And why has most of it disappeared? For kids. But it could provoke useful discussion in a college class on how far humans are beasts, whether we are a part of or apart from nature, on nature and culture, and whether our beastliness is part of the problem or part of the solution. (v.13, #3)

McDaniel, Bruce A., "Economic and Social Foundations of Solar Energy,"  *Environmental Ethics* 5(1983):155-168. Solar energy is supported as an expression of certain values--such as individual freedom--and not as the satisfaction of economic preferences. (Katz, Bibl # 1)


McDaniel, Bruce A. "Economic and Social Foundations of Solar Energy."  *Environmental Ethics* 5(1983):155-68. Underlying solar energy development is a fundamental issue of values and individual choices. Where solar energy comes to include such ideas as appropriate decentralized technology, self-sufficiency and autonomy, and a responsibility to conserve and preserve the environment, solar energy can become a channel for exploring alternative values. The requirement here is to view solar energy not as just another energy source maintaining an ever increasing flow of consumption goods. Rather, solar energy should be viewed as an opportunity for the development of values which expand individual choices through the creative process of the community paradigm.  McDaniel is at the Economics department, Marquette University, Milwaukee, WI. (EE)

McDaniel, Jay B. *Earth, Sky, Gods and Mortals: Developing an Ecological Spirituality* (Mystic, CT: Twenty-Third Publications, 1990). 214 pages. McDaniel weaves together various strands of contemporary theology for an ecological spirituality. Influenced by process theology, the author synthesizes core insights of feminism, liberation theology, creation theology, and world religions. Study questions and an annotated bibliography. This is a work of ecological theology more than environmental ethics. Influenced by the process philosophy of Whitehead and contemporary feminist thought about ethics, McDaniel articulates one vision of an "ecological Christianity." McDaniel is professor of religion at Hendrix College, Conway, Arkansas, has served as chair of Meadowcreek Project, and is a member of the Church and Society Working Committee of the World Council of Churches. (v1,#1)


McDaniel, Jay B., *Living from the Center: Spirituality in an Age of Consumerism*. St. Louis: Chalice Press, 2000. Ten healing alternatives to the temptations of consumerism, including: "The world is not a global marketplace, but rather a gorgeous planet, filled with many creatures, each of whom is loved by God on its own terms and for its own sake, and each of whom contains God within." (v.13,#1)


McDaniel, Jay. "Christian Spirituality as Openness toward Fellow Creatures." *Environmental Ethics* 8(1986):33-46. In developing theologies and spiritualities of ecology, Christians can learn from the Nobel laureate Barbara McClintock and from process theology. That "feeling for the organism" of which McClintock speaks can be understood within a process context as a distinctive mode of spirituality. The feeling is an intuitive and sympathetic apprehension of another creature in a way which mirrors God's own way of perceiving. It involves feeling the
other creature as a fellow subject with intrinsic value. A subjective capacity of this sort is by no means sufficient for a spirituality of ecology, but by all means necessary. McDaniel is at the department of religion, Hendrix College, Conway, AR. (EE)

McDaniel, Jay. "Physical Matter as Creative and Sentient." Environmental Ethics 5(1983):291-317. With the emergence of quantum theory, the Newtonian idea that matter is inert, devoid of creativity and sentience, becomes questionable. Yet, physicists have by no means agreed upon an alternative understanding that can replace the Newtonian paradigm. Henry Stapp and others argue that Whitehead's thought provides a peculiarly appropriate framework for a new understanding of matter in light of quantum theory. The implications for a theology of ecology are manifold. No longer are matter and mind utterly discontinuous, nor is matter devoid of value until assigned value by humans or by God. Even the divine reality is, in a certain sense, "material." This calls for a new sensitivity within Western religion, in which religion itself becomes openness to, and appreciation for, physical matter. McDaniel is at the department of religion, Hendrix College, Conway, AR. (EE)


McDonald, Hugh P. "Dewey's Naturalism." In the recent literature of environmental ethics, certain criticisms of pragmatism in general and Dewey in particular have been made, specifically, that certain features of pragmatism make it unsuitable as an environmental ethic. Eric Katz asserts that pragmatism is an inherently anthropocentric and subjective philosophy. Bob Pepperman Taylor argues that Dewey's naturalism in particular is anthropocentric in that it concentrates on human nature. I challenge both of these views in the context of Dewey's naturalism. I discuss his naturalism, his critique of subjectivity, his naturalization of intrinsic value, and his holistic treatment of justification. Environmental Ethics 24(2002):189-208. (EE)

McDonald, Bryan "Considering the Nature of Wilderness: Reflections on Roderick Nash's 'Wilderness and the American Mind'' Organization and Environment 14 (No. 2, June 2001) pp.188-201. This piece considers both Nash's work and the continued relevance and impact of his ideas. The objective way Nash describes wilderness as a pristine place through much of his work has become increasingly problematic as scholars consider the ways in which humans construct and reconstruct different and often contradictory conceptualizations of nature. Although Nash's work does not definitively explore the concept of wilderness and its modern significance, it does provide a foundational consideration of the way Americans have interacted
with the concept of a reality not modified by human industry, culture or technology. MacDonald is a doctoral student at the School of Social Ecology, University of California at Irvine. (v.13,#2)

McDonald, Hugh P., John Dewey and Environmental Philosophy. Albany, NY: State University of New York Press, 2004. Major figures in contemporary environmental ethics compared, contrasted with a detailed analysis of John Dewey’s ethics, his theory of intrinsic value, and his holistic approach to moral justification. Arguing against the idea that Dewey’s philosophy is anthropocentric, McDonald claims that using Dewey’s philosophy will result in a superior framework for environmental ethics. McDonald is in philosophy at New York City College of Technology (CUNY).

McDonough, William, and Braungart, Michael, "The Next Industrial Revolution," The Atlantic Monthly, October 1998, pages 82-92. Since UNCED at Rio de Janeiro, the business buzzword has been "eco-efficiency." "Eco-efficiency is an outwardly admirable and certainly well-intended concept, but, unfortunately, it is not a strategy for success over the long term, because it does not reach deep enough. It works within the same system that caused the problem in the first place, slowing it down with moral proscriptions and punitive demands. It presents little more than an illusion of change. Relying on eco-efficiency to save the environment will in fact achieve the opposite--it will let industry finish off everything quietly, persistently, and completely" (p. 83). The authors propose instead "eco-effectiveness." "Our concept of eco-effectiveness leads to human industry that is regenerative rather than depletive. It involves the design of things that celebrate interdependence with other living systems. From an industrial-design perspective, it means products that work within cradle-to-cradle life cycles rather than cradle-to-grave ones" (p. 88). (v.9,#4)


--Alford, William P., and Shen, Yuanyuan, "Limits of the Law in Addressing China's Environmental Dilemma"
--Panayotou, Theodore, "The Effectiveness and Efficiency of Environmental Policy in China"
--Wu, Baozhong, He, Kebin, Fan Yuansheng, and Shao, Weijun, "The Status and Trend of China's Policies on Climate Change" (v.10,#2)


McFague, Sally, *The Body of God: An Ecological Theology*. Minneapolis, MN: Fortress Press, 1993. Most accounts of religion and science address only issues pertaining to epistemology and method or offer a simple theology of the stewardship of nature. McFague wants to link the whole scientific worldview with questions of social justice, the environment, and Christian doctrines. She wants an organic model and constructs something like a liberation theology of nature. She shifts from person-centered to cosmos-centered theology. Seeing the universe as God's body impels us into an ethic of care. This is a model of God specifically for the sake of the Earth. McFague teaches theology at Vanderbilt Divinity School. Her 1987 *Models of God* received the American Academy of Religion's Award for Excellence. (v4,#1)

McFague, Sallie. *Super, Natural Christians: How We Should Love Nature*. Minneapolis: Augsburg Fortress, 1997. 200pp. $15 paper. Reorienting our religious sensitivities from the "supernatural" to the "super, natural" can help us "see these earth others as we see the human others--as made in the imago dei--and therefore as both subjects in themselves and as intimations of God." McFague teaches theology at Vanderbilt Divinity School. (v8,#1)

McGaa, Ed, *Eagle Man, Mother Earth Spirituality: Native American Paths to Healing Ourselves and Our World*. 230 pages. $14.95. San Francisco: Harper and Row, 1990. A Sioux Indian with a law degree from the University of South Dakota, also a Marine Corps veteran of over 100 combat missions in Viet Nam, argues that "a reversal of world values, a spiritual concept of the earth as God-created and sacred, is in order before we two-leggeds can be environmentally effective on a global basis." (v2,#4)

McGarigal, K; Romme, WH; Crist, M; Roworth, E; "Cumulative effects of roads and logging on landscape structure in the San Juan Mountains, Colorado (USA)," *Landscape Ecology* 16( no. 4, 2001):327-349. (v.13,#1)

McGarvey, Daniel J. "Merging Precaution with Sound Science under the Endangered Species Act.@ BioScience* Vol. 57, no. 1 (2007): 65-70. Hypothesis tests, which aim to minimize type I errors (false positive results), are standard procedures in scientific research, but they are often inappropriate in Endangered Species Act (ESA) reviews, where the primary objective is to prevent type II errors (false negative results). Recognizing this disparity is particularly important when the best data available are sparse and therefore lack statistical power, because hypothesis tests that use data sets with low statistical power are likely to commit type II errors, thereby denying necessary protection to threatened and endangered species. Equivalence tests can alleviate this problem, and ensure that imperiled species receive the benefit of the doubt, by switching the null and alternative hypotheses. These points are illustrated by critiquing a recent review of ESA requirements for endangered fishes in Upper Klamath Lake (southern Oregon).


McGee, Glenn, "The Relevance of Foucault to Whiteheadian Environmental Ethics." *Environmental Ethics* 16(1994):419-424. Although he devotes little explicit analysis to ethics, Whitehead's understanding of the human moral life immerses both human moral agency and environmental ethics in the natural world, judging good actions in the context of complex and interdependent histories of value present in societies of what he calls actual occasions. In this sense,
Whiteheadian environmental ethics draws on the most interesting features of Michel Foucault's genealogies of values that suffuse institutions. Nevertheless, a Whiteheadian notion of environmental ethics exceeds Foucault's work in that Whitehead acknowledges the possibility of responsible human values and actions with regard to the environment. McGee is with the Dept. of Philosophy, University of Massachusetts, Dartmouth, Dartmouth, MA. (EE)


McGinn, Thomas, "Ecology and Ethics," *IPQ: International Philosophical Quarterly* 14(1974):149-160. "Developed countries have an obligation to restore a disturbed balance of nature. If man must respect nature as he respects his own body, a new emphasis on cooperation with natural processes must replace disruptive exploitation. But economic and technological development looked at on a world scale raises the different problem of distributive justice. ... The ethics of ecology joined to the ethics of distributive justice furnish the necessary guidelines for this planning. Any further destruction of the balance of nature is an attack on man and as such can be condemned on humanistic moral grounds." McGinn has taught at Makerere University in Uganda.


McGinnis, Michael V., "On the Verge of Collapse: The Columbia River System, Wild Salmon and the Northwest Power Planning Council," *Natural Resources Journal* 35(1995):63-92. The Columbia River Basin contains several species of endangered fish and wildlife. The Northwest Power Planning Council has attempted to restore salmon. The stakeholders are presumed to share values about the landscape, their sense of place in it, their relationship to nature, and to share faith in the ability of science and technology to restore ecosystems. Cooperation requires a high level of ecocentrism, principles of reverence, respect, humility, responsibility, care and respect--essentially an ethic of the environment. Nevertheless, the biological collapse of the salmon is at risk. But there is some hope. McGinnis is at the Center for Bioregional Studies and Conflict Resolution, Goleta, CA. (v.10,#1)

McGinnis, Michael V. "Myth, Nature, and the Bureaucratic Experience." *Environmental Ethics* 16(1994):425-436. From the "deep" ecological perspective, there is a dualism between an ecocentric and an anthropocentric perspective, and this dualism is reflected in the ideal of the bureaucratic experience. The bureaucrat lives by the myth of the human ability to control nature. An eco-myth is evolving that can offer one means of transcending the dominant bureaucratic mythic experience. This eco-myth moves toward a positive and sensitive human relationship with nature. A collective experience that values nature on its own terms and not as standing reserve. This position is no less mythic than the one it is replacing, but it is a better myth, because, being non-dualist, it offers the prospect of a political society in harmony with nature. McGinnis is with the Center for Bioregional Studies, Goleta, CA. (EE)


McGinnis, Michael Vincent, "Deep Ecology and the Foundations of Restoration," Inquiry 39(no. 2, June, 1996):203-217. "Throughout the globe, degraded ecosystems are in desperate need of restoration. Restoration is based on world-view and the human relationship with the natural world, our place, and the landscape. The question is, can society and its institutions shift from development and use of natural resources to ecological restoration of the natural world without a change in world-view? Some world-views lead to more destructive human behavior than others. Following Naess's ecosophical comparison of the deep and shallow ecology movements, this essay depicts the relationships between restorationists and the natural world. Contrast the anti-restoration position of Katz/Elliot. In deep ecological restoration we can develop a realization that our community is part of the self-producing character of all life. In deep ecological restoration, we find one important medium for the institutionalization, politicalization, and transpersonalization of a deeper understanding of what it means to be human being with nature." McGinnis is with the Center for Bioregional Conflict Resolution, Goleta, CA. (v8,#3)

McGlone, John J., " What is Animal Welfare?", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. A theoretical framework is developed to distinguish between acceptable and unacceptable welfare. To use this model, we can first consider a hypothetical environment that meets all known needs. If we then impose a graded stressor and take measures we could initially detect only behavioural changes. The animal would still be in a state of well-being. As the environment changes further, the animal makes major, measurable behavioural and physiological adjustments. Still, these changes are in the range of normal homeokinetic adjustment, and are characteristic of a response to stress. Well-being is maintained, with some effort, but the animal, although not comfortable, maintains an acceptable level of well-being. These types of physiological and behavioural adjustments would also be observed among wild counterparts of the domestic species in a natural setting. Next, the animal reaches a state of environmental stress in which it would suffer health and reproductive problems if it remained in this state for a prolonged period. Even though the animal could live in this state for a long time, its well-being is lowered. The final state is a severe, acute challenge that results in death in a short time. Of course, everyone would agree the animal's welfare is poor in this final state. The question of where to draw the line between normal and poor welfare is critical. Because feeling a little poorly is much like feeling hungry (something we all normally experience from time to time), this cannot be the critical measure of well-being. Rather, only when animals reach a prepathological state (Moberg, 1985) can we say welfare is poor. Two examples are included to support the model: pain-induced immunosuppression and immunosuppression associated with depression. McGlone is in the Departments of Animal Science & Cell Biology, Texas Tech University, Lubbock, Texas 79409-2141.


McGowan, Christopher, The Raptor and the Lamb: Predators and Prey in the Living World. New York: Henry Holt, 1997. 235 pages. $ 25. Predation is one of the fundamental forces driving the economy of life on Earth, and humans are fascinated by it. Studying predation offers a way to understand dynamic relations among species and to see the adaptations made in response to a dangerous world. McGowan is in zoology at the University of Toronto. (v8,#3)

McGrath, Alister, *The Reenchantment of Nature: The Denial of Religion and the Ecologic Crisis*. New York: Doubleday, 2002. Contrary to Lynn White and to the cultured despisers of religion, it is not Christianity that is the cause of the environmental crisis, but the Enlightenment secularizing of nature and exalting of human autonomy. Belief in the Christian God brings with it a profound sense of human limits with regard to nature and a thoroughgoing respect for and wonder at nature, a reenchantment of nature for which many, especially exponents of the Romantic tradition as Wordsworth and Thoreau, have long been searching. McGrath devotes much less time to the anti-nature elements within Christianity, or to the ambiguous understandings of nature as being both good and fallen. McGrath is professor of historical theology, Wycliffe Hall, Oxford.

McGregor, Liz, "Kruger’s thriving elephant herds face a new cull," *The Observer* (U.K.), International Magazine, Sunday August 31, 2003. More than 3,000 elephants in Kruger National Park in South Africa face culling. There are 11,000 elephants in the park and they are reproducing in this protected and benign environment at about 1,000 per year. Elephants reproduce about once every four years between the ages of 14 and 45. They are good parents and infant mortality is negligible, and they live for up to 70 years. They are eating up the park, say officials. Contraception methods have failed. (v.14, #4)

McGregor, Robert Kuhn, *A Wider View of the Universe: Henry Thoreau's Study of Nature*. Champaign, IL: University of Illinois Press, 1997. Using Thoreau’s unabridged journals and field notes, McGregor analyzes Thoreau's efforts to understand and form a comprehensive view of nature as a spiritual whole in which all species are interdependent. (v9,#2)


Comprehensive up-to-date syntheses of work on chimpanzees, baboons, gorillas, and orangutans, drawing on decades of international field work, zoo and laboratory studies. (v7, #3)


McInnis, Noel, and Don Albrecht, ed., *What Makes Education Environmental?* Washington, DC: Environmental Educators, Inc., and Louisville, KY: Data Courier, Inc., 1975. Two dozen articles. The authors are both freelance authors, based in Wisconsin. (v6,#2)

McIntosh, Alastair, "The Emperor has no Clothes ... Let us Paint our Loincloths Rainbow: A Classical and Feminist Critique of Contemporary Science Policy," *Environmental Values* 5(1996):3-30. The British government's White Paper on science together with government research council reports are used as a basis for critiquing current science policy and its intensifying orientation, British and worldwide, towards industrial and military development. The critique draws particularly on Plato and Bacon as yardsticks to address who science is for, what values it honours and where current policy departs from imperatives of socio-ecological justice. Metaphors of the Emperor's New Clothes and incremental spectral shift in attitude help illuminate both the problems and ways forward. The paper calls for a re-integration of classical
perspectives with added insights, often ecofeminist, from philosophy, poetics and a theology of reverence. Predication on the values of love, interconnectedness and orientation towards children's all-round development should be central to curricular reform. Consistent with the views of Plato, the original founder of the Academy, the utilitarian role of science ought to be balanced with a contemplative role of science as the art of knowing ourselves in relation to nature. Only with such a holistic academic approach can it adequately rise to providing a pedagogy of authentic human development, service to the poor and remedies, rather than contribution, to the ongoing destruction of nature. KEYWORDS: Philosophy of science, ecophilosophy, ecofeminism, ecotheology, human ecology, geopoetics, reverence, deep ecology, environmental education, science policy, Plato, Bacon. (EV)


McIntosh, Alistair, Soil and Soul: People versus Corporate Power. London: Aurum Press, 2001. A radical politics of place, with much attention to the Hebrides of Scotland. Earth, or soil in a metaphorical sense, and people, or metaphorically, soul. The interrelationships between natural ecology, social community, and the human spirit. Engagement with soil and soil transforms into a vision of freedom and social justice. A radical liberation theology, rediscovering both the presence of God in nature and the neglected femininity of divine wisdom. Two successful campaigns at community empowerment: land reform on the Isle of Eigg and in the new Scottish Parliament. How the people of the Isle of Harris resisted their mountain being turned into the gravel pit of Europe by a multinational road-stone company. The world can be reconstituted; we can all assume responsibility for our lives and for the planet. A call to "make beauty blossom anew out of desecration". (v.13,#4)


McKay, Christopher P. and Robert H. Haynes, "Should We Implant Life on Mars?" Scientific American, December 1990. "Traditional theories of value are based on two ingrained habits of human thought: anthropocentrism and geocentrism. Principles of ethics have been formulated primarily to guide and govern the relations among people here on Earth. The scope of ethical theory has recently been expanded, however, to encompass all forms of nonhuman life, ecosystems and even inanimate structures, such as rocks, landforms and barren planets. This radical environmental ethic includes the idea that Earth's rich and diverse biota is inherently good. Thus, the biosphere as we know it is by definition what these theories assert ought to be." Turning to the solar system, "ecopoiesis" is "the fabrication of a self-sustaining ecosystem on a lifeless planet." "Clearly, ecopoiesis raises philosophical issues that can be resolved only by adopting a cosmocentric theory of intrinsic values." "If and only if no potentially viable forms of life are found should we attempt to introduce emigrant species from Earth." McKay is a research scientist with NASA in California and Haynes is distinguished research professor of biology at York University, Toronto. NASA has just launched an eight-year "Search for Extraterrestrial Intelligence--Microwave Observing Project (SETI-MOP)" that will scan 10 billion times more search space than the sum of all previous searches. (v1,#4)

McKean, Andrew, "Manhunters," Outdoor Life 213 (no. 3, March 2006): 52-57. Wolves killed Kenton Carnegie, a college student on a short-term contract to survey mineral deposits in northern Saskatchewan in November 2005, in what looks like a clear case of wolf predation on humans. This is the first documented wolf-caused fatality of a human in North America in at least 100 years and perhaps the first ever on this continent. There are, however, some 80 incidents of wolves attacking or injuring people, without fatality. A frequent issue in such incidents is whether the wolves had been harassed, not an issue here. However, these wolves were quite habituated to people, living around mine site camps and their dumps, and some say that the wolves were living in a quite unnatural condition and had become more like junkyard dogs. Dogs in North America kill about twenty people a year.


McKenny, Gerald P., To Relieve the Human Condition: Bioethics, Technology, and the Body. Albany, NY: State University of New York Press, 1998. In contrast to the utopian quest of medicine for perfect health, with the human body brought under our choices and desires, McKenny argues that the task of bioethics is to explore the moral significance of the body as it is expressed in the discourse and practice of moral and religious traditions. McKenny is in religious studies at Rice University. (v8,#3)

McKibben, Bill, The End of Nature. New York: Random House, 1989. Pp. ix, 226. Originally a lengthy magazine article for The New Yorker, this is a highly readable and significant merging of scientific, religious, philosophical, and political thought concerning the environmental crisis. McKibben begins with the scientific fact that humanity has altered the atmosphere, and thus the climate of the earth. Nothing, therefore, exists in the world untouched by human technology; the idea of a pure, unspoiled nature, existing somehow apart from human civilization, is an impossible contradiction. McKibben explores the meaning of this end of nature, particularly for religious and philosophical conceptions of humanity. The end of the book involves a tour through two opposing philosophical visions, continued domination of nature and resistance to human-centeredness. As a work of journalism, this book has no documentation---there are no footnotes despite many references to other books and thinkers. Nonetheless, it is a poignant and moving introduction to the problems of environmental philosophy. (Katz, Bibl # 2)


McKibben, Bill, Maybe One: A Personal and Environmental Argument for Single-Child Families. New York: Simon and Schuster, 1998. 240 pages. Summarized in "The Case for Single-Child Families," Christian Century, May 13, 1998, vol. 115, pp. 498-504. A sensitive study of the pros and cons of having one child instead of two, or three, with saving the environment in mind. In some senses this can seem concerned and selfless, though from other perspectives, one has to take seriously those who think having no children, or one, is selfish, since such parents often wish to do more self-fulfilling things with themselves than to bother with children. "My hope is not to settle this question for anyone else; it truly isn't my business what you chose to do. All I want to do is to open the debate, to remove 'population' from the category of abstraction and
make it the very real consideration of how many children you or I decide to bear. No single
decision any of us will make will mean as much to our own lives or to the life of the planet."

"The beginning of Genesis contains the fateful command ... to 'be fruitful and multiply, and
fill the earth.' That this was the first commandment gave it special priority. And it was biological,
eto, a command that echoed what our genes already shouted. But there is something else
unique about it--it is the first commandment we have fulfilled. ... We can check this
commandment off the list. ... But when you check something off a list, you don't throw the list
away. You look further down the list and see what comes next. ... Feed the hungry, clothe the
naked, comfort the oppressed, love your neighbor as yourself; heal the earth." McKibben, author
of The End of Nature, is Sunday School superintendent at a Methodist Church in upstate New
York. He and his wife have one child.

United States' largest cable TV system taped, almost 100 channels. McKibben analyzed the
films, programs, news, commercials to discover the nature of electronic media and how it
reduces the sort of information we receive. This analysis is compared with the information
presented to him on an overnight stay in the Adirondack Mountains. The ecological crisis is
grounded in an inability to relate to the natural world, and this is compounded by the media. What
habits of mind and body do TV ads and jingles help produce? Sloppy habits, where we cease to
be mindful of how we are connected to a finite Earth. McKibben (like Gore) analyzes this as, at
depth, a spiritual problem. (v3,#4)


McKibben, Bill, "Climate Change and the Unraveling of Creation," Christian Century 116 (no. 34, Dec. 8, 1999):1196-1199. "In the past 30 years we have systematically and even more rapidly
destroyed this planet's inventory of life. ... In the case of the struggle to save and preserve the
environment--God's creation--the church's leadership is absolutely mandatory." McKibben is the
author of The End of Nature and Maybe One, recently reissued by Penguin. (v10,#4)

A supplement to the Harvard Divinity Bulletin, vol 25, no. 2/3, 1996. "If we are not to wreck
God's creation, then there are certain things we simply must not do--we simply must not continue
consuming as we are now. And there are certain thing we must do--we must share our bounty
with the rest of the world, finding somewhere a middle ground so they don't follow our path to
consumer development" (p. 20). McKibben is the author of The End of Nature and Hope, Human
and Wild: True Stories of Living Gently on the Earth; and lives in the Adirondacks. (v7,#2)

McKibben, Bill, Hope, Human and Wild. Little, Brown, 1995. $ 22.95. After The End of Nature,
McKibben now finds hope for our beleaguered Earth. Hope begins when he notices the
remarkable recovery of forest and wildlife in the Adirondacks around his home, even though the
area had been a barren, overlogged wasteland only a hundred years ago. This sent him on a
quest for other signs of hope, found as far off as Brazil and India. (v6,#4)

frontiers of bioscience and robotics of how these developments are both rapidly maturing and
veering inexorably out of control. McKibben applauds genetic engineering when linked with
therapy, for in this case we do not tamper with the fundamental genetic materials passed to
future generations in the germline. But genetic engineering is likely also to be used to enhance
height, intelligence, athletic ability, or just about any trait imaginable. Parents will choose the genes that shape their children's future; a child will become a pianist because that's what his parents choose for him, not because he chose it. If we can reshape our bodies to overcome any setbacks we encounter, life is meaningless because you can never know how you would really feel, if your body were not pumping designer proteins. This starts us on the road to leaving human nature behind, engineering ourselves into a "posthumanity." The genetic engineering and nanotechnology future crosses the line beyond "enough" into the zone of "way too much." There is a spiritual boundary, "the enough point."

McKibben, Bill, *Wandering Home: A Long Walk Across America's Most Hopeful Landscape: Vermont's Champaign Valley and New York's Adirondacks.* New York: Crown (Random House), 2005. McKibben takes a journey between the two homes he owns, from the first in Ripton, Vermont, where he lives now, to the second in the Adirondack town of Johnsburg, where he spent the better part of his adult life. The two homes are about seventy miles apart, but the meandering route he takes becomes a few hundred miles. He finds the landscape physically rich; and the region with its pockets of communities endeavoring to live intentionally and sustainably offers the promise of "graceful inhabitation, for working out the answers that the planet is posing in this age of ecological pinch and social fray." He comes across one newly built house "four times too large for any conceivable purpose," and worries "that the scale of this region--herb farms, piano teaching, general stores, little libraries--coexist[s] uneasily with the high-octane national economy."

McKibben, Bill, "A Deeper Shade of Green," *National Geographic,* August 2006. Ideas for a new, cultural environmentalism. "Humans have never faced a civilization-scale challenge before. Whether we deal with it gracefully or not depends, I believe, on what happens to that creed we call environmentalism." The original environmentalism, saving remnants of wild nature, was impressively successful, "but when it came to deal with global warming, this kind of environmentalism flunked." People desire growth and that depends on fossil fuel consumption; we must address the issue of intelligent growth that builds on "people's aspirations for good and secure and durable lives." "We would need a new kind of cultural environmentalism that asks deeper questions than we're used to asking." McKibben lives in a Vermont valley, working out this new cultural environmentalism, and wondering whether it means *The End of Nature.*


McKinley, Jr., James C., "With Help, Sea Turtles Rally to Escape Oblivion," *New York Times,* October 14, 2004, A1, A12. Olive ridley sea turtles are recovering in Mexico, although the other six species of sea turtles are not doing well. Hundreds of thousands of ridley sea turtles now come ashore in Mexico to nest, recovering since the 1980's, with this year's landing one of the largest in recent memory. But the turtles and their nests have to be guarded at gunpoint against poachers, who kill the turtles and sell the eggs as a delicacy in Mexican markets. (v.14, #4)

Mckinney, William J. and H. Hamner Hill. "Of Sustainability and Precaution: The Logical, Epistemological, and Moral Problems of the Precautionary Principle and Their Implications for
Sustainable Development.” Ethics and the Environment 5(2000):77-88. ABSTRACT: Front the convening of the Brundtland Commission in 1983 to the United Nations Conference on Environment and Development and beyond, sustainable development has been one of the core issues facing environmental ethicists and policy makers. The challenge facing both policy makers and ethicists has been to ascertain the proper formulation and implementation of sustainable development practices either within the present global market economy or within a new, more ecological par This analysis, however, takes a slightly different tack. (E&E)

McKinney, Matthew J., "Dispute Resolution Courses in Natural Resource Schools: Status and Needs for the Future," Renewable Resources Journal, Summer 1993. Much of the problem in environmental conflict is structural, as well as differences on issues. Few opportunities exist for the interests affected by proposed actions to participate directly in the decisionmaking process. What's going on, and what might be better, at 46 natural resource schools in the training of natural resource professionals entering this arena. McKinney has taught a dispute resolution course at the University of Montana, and is director of the Montana Consensus Council. (v6,#2)

McKinney, Matthew J., "Designing a Dispute Resolution System for Water Policy and Management," Negotiation Journal, April 1992. McKinney has recently been named the director of the Montana Office of Public Policy Dispute Resolution. He completed his M.A. in environmental ethics at Colorado State University and a Ph.D. in natural resources at the University of Michigan. (v4,#3)


McKnight, Bill M., ed., Biological Pollution: The Control and Impact of Invasive Exotic Species. Indianapolis: Indiana Academy of Science, 1993. (1102 North Butler Avenue, Indianapolis, IN 46219). (v4,#4)

McLaughlin, Andrew, "Marxism and the Mastery of Nature: An Ecological Critique," in Roger S. Gottlieb, ed., Radical Philosophy: Tradition, Counter-Tradition, Politics (Philadelphia: Temple University Press, 1993) Within the Marxist tradition, industrialism and the domination of nature have largely been endorsed as a potentially progressive expansion of human power and the avenue toward the historical realization of human freedom. But any dialectical project that acknowledges the embeddedness of humanity within nature should be skeptical of the project of the domination of nature. The Marxist project of domination is incompatible with a dialectical understanding of society and nature. McLaughlin is a philosopher at Lehman college in the Bronx, New York. (v5,#1)


McLaughlin, Andrew, "Images and Ethics of Nature," Environmental Ethics 7(1985):293-320. This is a further development of a paper on science and ecology. Here McLaughlin discusses the way different world-views construct an image of nature, and consequently, an ethics of nature. Science is merely instrumental, and so nature is not respected. But alternative views of nature,
primarily the image of an interconnected web, can be derived from ecological principles and Buddhism. (Katz, Bibl # 1)

McLaughlin, Andrew, "Ecology, Capitalism, and Socialism." Socialism and Democracy (Spring/Summer 1990): 69-102. Excellent overview of the failures of both capitalism and socialism (in its current forms) to deal with ecological problems. Capitalism fails for three fundamental reasons: the dynamics of markets, the discounting of the future, and the requirement of non-sustainable growth. Centralized socialism fails because "bureaucratic rationality" is unable "to achieve an ecologically adequate society" (p. 91), primarily because of inadequate knowledge of the manipulation of environments. A socialism tied to bioregions, democratic and decentralized, is the best possible solution. (Katz, Bibl # 2)


McLaughlin, A., "Is Science Successful? An Ecological View." Philosophical Inquiry 6, no. 1 (Winter 1984): 39-46. McLaughlin uses the metaphor of an organism as part of a net to show why we believe science to be successful and why at the same time it is not--i.e., why it is leading into an ecological crisis (see also McLaughlin's article in Environmental Ethics 7 [Winter 1985]. (Katz, Bibl # 1)

McLaughlin, Andrew, "Ecology, Capitalism, and Socialism" Socialism and Democracy Spring/Summer 1990. There are theoretical and practical difficulties matching capitalism with an ecologically sound human society or with adequate respect for nature. Socialism has more promise theoretically, but existing socialist societies are often no better in practice than capitalist ones. The centralized Soviet bureaucracy is a major problem. Bioregional (green) socialism could be an answer. Useful survey of the Soviet debate about nature preserves. (v1,#2)


McLaughlin, Andrew. "Images and Ethics of Nature." Environmental Ethics 7(1985):293-319. Science generates an image of nature as devoid of meaning or value, and this image makes moral limits on the human manipulation of nature appear irrational. In part this results from the particular kind of abstraction that constitutes scientific activity. For both epistemological and practical reasons this abstraction should not be taken as the only reality of nature. Such mistaking becomes increasingly likely--and dangerous--as science and technology are used in the construction of the world within which we experience nature and ourselves. Three alternative images of nature are discussed to indicate other possibilities. Imaging nature as an interconnected network, a view rooted in both ecology and Buddhism, is a more comprehensive and adequate foundation for conceptualizing the practical and ethical dimensions of humanity's relation with nature. McLaughlin is in the philosophy department, Lehman College, City University of New York, Bronx, NY. (EE)


McLean, Samantha. Review of Brian Tokar (Ed.), "Redesigning Life? The Worldwide Challenge to Genetic Engineering", Organization and Environment 14 (No. 4, December 2001) pp.474-77. McLean is a PhD student working on sustainable agriculture issues in the School of Social Ecology and Lifelong Learning at the University of Western Sydney, Australia. (v.13,#2)

McLean, Douglas, and Peter G. Brown, eds., Energy and the Future. Totowa, New Jersey: Rowan and Littlefield, 1983. Pp. 206. This is a collection of essays written under the auspices of the Center for Philosophy and Public Policy, University of Maryland. It is interdisciplinary; the main philosophical interest lies in the arguments regarding ethical obligations to future generations. Several perspectives are proposed: In two separate papers, Brian Barry, "Intergenerational Justice in Energy Policy," (pp. 15-30), and Talbot Page, "Intergenerational Justice as Opportunity," (pp. 38-58), argue that justice demands the preservation, not of resources, but of opportunities for the use of resources and the creation of the good life. David A. J. Richards, "Contractarian Theory, Intergenerational Justice, and Energy Policy" (pp.131-150), attempts to use the idea of Rawls' "original position" as a model for intergenerational justice. Hillel Steiner, "The Rights of Future Generations," (pp. 151-165), attacks the notion that nonexisting entities can have rights now and uses this critique to undermine the currently fashionable Lockean/Nozick view of property rights regarding natural resources. Douglas MacLean, "A Moral Requirement for Energy Policies," (pp. 180-197) argues that concern for the future is a moral value promoting the good life—it is not a contingent concern of human interest or preference. But the central essay in this collection is Derek Parfit's "Energy Policy and the Further Future: The Identity Problem" (pp. 166-179). I consider this essay, along with Parfit's "Future Generations: Further Problems," Philosophy and Public Affairs 11 (1982): 113-172, to be the most important theoretical work in the ethics of future generations. Parfit's problem is simple: any policy we contemporary people adopt will change the identities of the people who actually exist in the future; thus, our obligations regarding the future cannot be directed at future people. Nevertheless, Parfit still wants to claim that it is better for us to create a good world for the future. But for whom is it better? Not the people who exist because of the policy, and not the people who would have existed if we had adopted a different policy. Parfit's position amounts to this principle: "It is bad if those who live are worse off than those who might have lived." (p. 75). But he admits that this principle is, at present, unjustified. No argument concerning the obligations to future generations can avoid Parfit's paradox; but a solution to it will likely lead to a redrawing of the map of ethical principles (see pp. 176-178, "Theoretical Footnote"). (Parfit's work has produced a vast bibliography in its own right, and I do not list any of these works here. See, e.g., Ethics 96, no. 4 [1986], a Symposium on Derek Parfit's Reasons and Persons [Oxford University Press, 1984].)


McLuhan, T. C. *The Way of the Earth*. New York: Simon and Schuster, 1994. 570 pages. Hardcover, $30.00. Six diverse cultures that show how different spiritual traditions world-wide have valued, perceived, and understood the earth. Extensive art and literature from Aboriginal Australia, Greece, Africa, South America, and Native North America, with the intent of displaying underlying unities in the belief systems and wisdom of the peoples of the world. (v7, #3)


McMichael, Tony, *Human Frontiers, Environments and Disease: Past Patterns, Uncertain Futures*. Cambridge, UK: Cambridge University Press, 2001. Epidemiology and environments, past and future. The dilemma is that stressed environments promote disease epidemics. Most of the world lives at a level of privation Westerners would not accept, beyond the reach of the very resources Westerners cannot live without. The worsening dilemma is that to the extent that Westerners support their development in, and extension of their prosperity to, the rest of the world, they sow the seeds of everyone's destruction. There may already be too many people in the world to support universal living standards at a level Westerners consider minimal. There isn't enough land, enough water, or enough resources. In a zero sum game, reality trumps altruism; the price of comfort for some being the misery of others, including their epidemic diseases, which may also become ours. (v.13,#1)


McMillion, Scott, "Cherry Creek Poisoning Plan OK'd," *Bozeman Daily Chronicle* (7/24/98): 3. Poisoning three species of trout to assist an endangered trout. In order to provide habitat for West slope cutthroat trout, the Gallatin National Forest in Montana plans to remove brook, rainbow, and Yellowstone cutthroat trout from Cherry Lake in the Lee Metcalf Wilderness by poisoning the lake and its tributaries. The West slope cutthroats are candidates for listing under the Endangered Species Act. Because a waterfall kept any fish from reaching upstream on their own, the drainage was barren of trout until people introduced the fish earlier this century. Thus none of these species of fish are "native to this habitat," though one might argue that 50 to 80 years is sufficient for the introduced fish to become "naturalized." Ironically, about 100 miles away, National Park Service officials are trying to protect the Yellowstone cutthroat by killing Midwestern lake trout, a species that was introduced into Yellowstone Lake. (v.9,#3)

McMillion, Scott, "Cattle-killing Wolf Pack in for Shock," *Bozeman Daily Chronicle* (5/18/00): A1. Yellowstone wolves being trained to avoid cattle. Members of the Sheep Mountain wolf pack, one of about a dozen packs of restored wolves in Yellowstone area, are being captured, placed in a pen, and fitted with shock collars that will activate whenever they get within two meters of a calf placed in the pen with them. The pack has been killing cattle for several years and past attempts to modify their behavior (by killing members known to have eaten cattle) have failed. The plan is to train the wolves for several months so they realize "that livestock aren't prey items" and then release them back into their home territory. The hope is that these wolves will learn to avoid livestock and will teach their offspring to do the same. Ed Bangs, the leader of the wolf-restoration effort in the region, thinks "the only alternative is to shoot them all." But then a new pack would probably take over the territory that includes both private and public grazing land bordering the Park and they too would probably begin to prey on cattle. (v.11, #2)


McNairn, Heather E. and Mitchell, Bruce, "Locus of Control and Farmer Orientation: Effects on Conservation Adoption", Journal of Agricultural and Environmental Ethics 5(1992):87-102. Farmers in a southwestern Ontario watershed were surveyed to determine factors influencing their attitudes towards adoption of soil conservation practices. The majority of farmers in the watershed were internally motivated which indicates they believe that their own actions determine their successes and failures. Most respondents were also environmentally oriented. McNairn is in land resource science at the University of Guelph, Ontario. Mitchell is in geography at the University of Waterloo, Ontario.

McNally, Ruth and Peter Wheale, "Biopatenting and Biodiversity: Comparative Advantages in the New Global Order," The Ecologist 26 (no. 5, Sept.-Oct, 1996):222-228. Over the last two decades, the biosciences industry has been stretching the interpretation of patent law in order to attain intellectual property rights over genetically engineered living organisms. Such patent rights, coupled with moves to gain exclusive access to the biodiversity of the South, are leading to a new global order. Opposition to such "biotechnological imperialism" is gaining in momentum. McNally is in human sciences at Brunel University. Wheale is with the University of Surrey's European Management School. (v9,#1)


McNally, Ruth, Wheale, Peter. "Biopatenting and Biodiversity: Comparative Advantages in the New Global Order", The Ecologist 26(no.5, 1996):222. Genetic engineering has enabled novel species of plants, animals, and micro-organisms to be created as genes from totally unrelated species, which cannot breed with each other so are spliced together. To reap financial gain, the biotechnology industry has, over the past two decades, pushed for patent law to cover its "inventions". Patent rights over living organisms, combined with the industry's efforts to gain exclusive access to the world's biodiversity, are exacerbating the commodification and industrialized use of species. Opposition to this "biotechnological imperialism" is gaining momentum. (v7,#4)


McNamee, Kevin, "Undermining Wilderness," Alternatives 25(no. 4, Fall 1999):24-. The Canadian mining industry is abandoning its support for a national network of protected areas. (v.11,#1)

McNeeley, Jeffrey A., Kenton R. Miller, W. V. Reid, R. A. Mittermeier, T. B. Werner, Conserving the World's Biological Diversity. 1990. Available for $ US 18.00, including postage, from IUCN Publications, 1196 Gland, Switzerland; World Resources Institute, P. O. Box 4852 Hamden Station, Baltimore, MD 21211; or World Bank Publications, P. O. Box 7247-8619, Philadelphia, PA 19170-8619. (v1,#3)


McNeil, Jr., Donald G., "Kosher Authority Seeks Change in Steer Killings," New York Times, December 3, 2004, p. A 17. In the wake of accusations of cruelty from People for the Protection of Animals (PETA), the world's largest kosher certification authority has asked a major kosher slaughterhouse in Iowa (AgriProcessors Inc.) to change the way it kills animals. The plant is the U.S. largest producer of meat that is glatt kosher, the highest standard of cleanliness. It is also the only American plant allowed to export to Israel. Israel's chief rabbinate has also said that it will no longer accept meat from the plant, unless practices are changed. PETA managed clandestine videotaping of killings in the plant showing workers cutting the throats out of living steers and then dumping the animals on the floor where they thrashed and bellowed while bleeding to death.


Further information: On 19 February 1999, 34 experts, representing 28 different organizations and agencies, assembled at the offices of the American Zoo and Aquarium Association (AZA) in Silver Spring, Maryland in a consensus statement expressed alarm at the commercial bushmeat crisis in Africa and its impact on threatened and endangered species, particularly great apes. The bushmeat trade is having dire consequences, not only for wildlife, but also for people in Africa and throughout the world. If current unsustainable rates of exploitation continue, the commercial bushmeat trade will decimate, if not eliminate, some endangered species, such as great apes, forest elephants, and other fauna upon which the health of forest ecosystems depend. It may have already caused the extinction of Miss Waldron's red colobus monkey, which formerly existed in the forested zones of Ivory Coast and Ghana. The African great apes--chimpanzees, gorillas, and bonobos--are at particular risk. This illegal trade is destroying free-ranging populations of chimpanzees just when their protection in the wild is being recognized as important for understanding how to control the spread of HIV and other emerging infectious diseases in humans. Moreover, the killing and dressing of chimpanzee meat in the bush may present a human health risk for those engaged in this trade and is a potential point of entry for new diseases into the global human population.

African governments are called to take full responsibility for enforcing existing laws and maintaining vigilance against corruption, and until policy makers put the value of protecting wildlife ahead of immediate financial gain, there will be no way to stem the loss of Africa's irreplaceable biological heritage, including our closest living relatives, the great apes. Logging companies, mining firms, and other extractive industries bear a significant responsibility for the growth of the unregulated commercial bushmeat trade. They must ensure that illegal hunting of threatened and endangered species is prohibited in their concessions and minimize their impact on wildlife by providing alternative sources of food for their employees. They should also do all they can to contribute to equitable, transparent, and lasting solutions. Contact: Michael Hutchins,

McNutt, John, Boggs, Lesley P. Running Wild: Dispelling the Myths of the African Wild Dog. Washington, D.C.: Smithsonian Institution Press, 1997. 150 pp. $45. Uncovering extraordinary new facts about the life and habits of the African wild dog, the authors argue for its importance as an "indicator species" in one of the world's most ecologically significant wetlands. They document the hunting behavior, play rituals, and natural history of the Mombo pack in the heart of Botswana's Okavango Delta. (v8,#3)


McQueery, Margaret, and Gavrish, Tetyana, eds., Nuclear Legacy: Students of Two Atomic Cities. Columbus, OH: Battelle Press, 2000. Articles authored by students of the Tri-Cities area in the state of Washington, near the Hanford nuclear research facility, which produced plutonium, and Slavutych, Ukraine, near Chornobyl, who share a common inheritance--coming of age in a nuclear community. (v.13,#2)

McQuillan, Alan G., "Is National Forest Planning Incompatible with a Land Ethic?" Journal of Forestry, May 1990. "The forestry profession has not developed an acceptable methodology for allocating forest land among often mutually exclusive uses." "The question about which lands are suitable for timber production is not one that the profession is well-prepared to answer."

The Forest Service "determines what lands to allocate to timber harvest on the basis of whether they are needed to meet timber production targets established for each forest rather than on the basis of the forest lands' inherent productive potential. These targets may be passed down to the forest level or on the basis of local timber production goals set to meet the needs of existing or projected milling capacity in or near each national forest. Either way, by allowing output targets to drive the land allocation process, Forest Service planners can avoid the more difficult question of whether road building and timber harvesting represent the highest and best use of any particular ground in the forest." "It is hardly surprising that the agency tends toward
McQuillan, Alan G. "Passion and Instrumentality: Further Thoughts on the Callicott-Norton Debate." Environmental Ethics 20(1998):317-24. Although J. Baird Callicott and Bryan G. Norton define the word intrinsic quite differently, both are against any "essentialist" position which posits "an objectivist theory of value in nature." Viewed in this context, their differences emerge in terms of instrumentality and anthropocentrism. While a nonanthropocentrist position is tenable, it cannot be divorced from the centrality of human passion and desire. From the Humean perspective, assumed by both authors, however, desire does not reduce to instrumental value alone. As a result, Callicott's position emerges as the stronger argument: that the moral consideration of nature requires more than instrumental value, no matter how broadly instrumentality is construed. MacQuillan is in the School of Forestry, University of Montana. (EE)


McQuillan, Alan G., "Is National Forest Planning Incompatible with a Land Ethic?" Journal of Forestry 88 (no. 5, May 1990):31-37. "Can forest planning adhere in principle to Leopold's land ethic and juggle multiple uses in practice?" "The question about which lands are suitable for timber production is not one that the professional is well-prepared to answer. "It is hardly surprising that the agency [U. S. Forest Service] tends toward schizophrenia." McQuillan is director of the Wilderness Institute and a professor at the University of Montana, Missoula. (v2,#1)


McShane, Katie. "Ecosystem Health." Environmental Ethics 26(2004):227-245. On most understandings of what an ecosystem is, it is a kind of thing that can be literally, not just metaphorically, healthy or unhealthy. Health is best understood as a kind of well-being; a thing's health is a matter of retaining those structures and functions that are good for it. While it is true that what's good for an ecosystem depends on how we define the system and that how we define the system depends on our interests, these facts do not force us to the conclusion that an ecosystem has no good of its own. Ecosystems and persons can have goods of their own in spite of the fact that the schemes we use to categorize them are matters that we decide upon. (EE)
McShane, Katie, The Nature of Value: Environmentalist Challenges to Moral Theories, Ph.D. thesis, University of Michigan, Ann Arbor. 2002. Environmentalists have argued that contemporary ethical theories have overly strict rules about what kinds of things can be intrinsically valuable. These rules make it impossible for many of the things that environmentalists care deeply about to be considered bearers of intrinsic value—things which are not rational, sentient, or in some cases, even alive. In this dissertation I consider possible responses to this environmentalist criticism from within mainstream ethical theories. Using the value of ecosystems as a test case, I analyze what features a thing must have, and why, in order to be a (potential) possessor of intrinsic value on each of three ethical theories: wellbeing-based, Moorean, and rational attitude accounts. Ultimately, I argue that while a place can be made for the intrinsic value of ecosystems on all three theories, rational attitude accounts do the best job of accommodating environmentalist concerns without incurring other significant theoretical costs. McShane is in philosophy at North Carolina State University, but this year a visiting professor at the Center for Ethics and the Professions at the Kennedy School, Harvard University. Her committee was: Elizabeth Anderson (chair), Stephen Darwall, P. J. Ivanhoe, John Vandermeer (Biology).

McShane, Katie. "Why Environmental Ethics Shouldn't Give Up on Intrinsic Value." Environmental Ethics 29(2007):43-61. Recent critics (Andrew Light, Bryan Norton, Anthony Weston, and Bruce Morito, among others) have argued that we should give up talk of intrinsic value in general and that of nature in particular. While earlier theorists might have overestimated the importance of intrinsic value, these recent critics underestimate its importance. Claims about a thing's intrinsic value are claims about the distinctive way in which we have reason to care about that thing. If we understand intrinsic value in this manner, we can capture the core claims that environmentalists want to make about nature while avoiding the worries raised by contemporary critics. Since the distinction between intrinsic and extrinsic value plays a critical role in our understanding of the different ways that we do and should care about things, moral psychology, ethical theory in general, and environmental ethics in particular shouldn't give up on the concept of intrinsic value. (EE)

McShane, Katie, AAnthropocentrism vs. Nonanthropocentrism: Why Should We Care? Environmental Values 16(2007): 169-186. Many recent critical discussions of anthropocentrism have focused on Bryan Norton's 'convergence hypothesis': the claim that both anthropocentric and nonanthropocentric ethics will recommend the same environmentally responsible behaviours and policies. I argue that even if we grant the truth of Norton's convergence hypothesis, there are still good reasons to worry about anthropocentric ethics. Ethics legitimately raises questions about how to feel, not just about which actions to take or which policies to adopt. From the point of view of norms for feeling, anthropocentrism has very different practical implications from nonanthropocentrism; it undermines some of the common attitudes - love, respect, awe - that people think it appropriate to take toward the natural world. McShane is in philosophy, North Carolina State University.


Meadows, Donella, "Chicken Little, Cassandra, and the Real Wolf: So Many Ways to Think about the Future," Wild Earth 9 (No. 4, Wint 1999): 24- . (v.11,#2)


Mealey, Stephen P., "Ethical Hunting: Updating an Old Heritage for America's Hunting and Wildlife Conservation Future." Keynote address at the Foundation for North American Wild Sheep Conference, San Antonio, Texas, February 18, 1994. "I believe killing wildlife, as part of hunting, is acceptable only when it is the true and artful climax of the hunting ritual, practiced as the timeless art of self-sustenance, with reconnection to, and participation in, the natural process of 'life unto life only through death.' Full appreciation of this most fundamental and bittersweet process comes with full participation, and full participation through the hunt cannot occur without experiencing, first-hand, the kill." Mealy is Forest Supervisor of Boise National Forest. Copies on request Stephen P. Mealey, Boise National Forest, 1750 Front Street, Boise, ID 83702. (v5,#1)

Meaton, Julia, Morrice, David, "The Ethics and Politics of Private Automobile Use,"Environmental Ethics 18(1996):39-54. Despite growing awareness of its various problems, private automobile use is still seen as an inviolable individual freedom. We consider the ethical arguments for and against private automobile use with particular reference to John Stuart Mill's theory of freedom. There is much evidence to show that private automobile use is an other-regarding harmful activity that is, therefore, on Mill's terms, liable to public control. Although it cannot be an entirely self-regarding activity, we consider private automobile use in this category and argue that even on Mill's terms it can properly be subjected to extensive control. We also challenge Mill's theory and argue that private automobile use lacks adequate moral justification. We then consider the policy implications of this ethical argument and review some of the policy options available. We conclude that although an immediate total ban on private automobile use is justifiable, it is inadvisable at this time and that more limited, but effective control should be implemented in preparation for a total ban. Meaton is in geographical and environmental sciences, Huddersfield University, Yorkshire, UK. Morrice is in social sciences, Staffordshire University, UK. (EE)


Mech, L. David, "The Challenge and Opportunity of Recovering Wolf Populations," Conservation Biology 9 (1995): 270-78. There is an expanding opportunity for wolf recovery, but, because of
the wolf's mobility, fertility, and long life, there are few places where wolves can be reintroduced without control, which means trapping and killing problem wolves. Those who favor wolves typically favor government rather than public control, but if control were allowed by the public (ranchers, landowners, hunters), this could be more effective and cheaper, more acceptable to those for whom wolves create problems, and allow wolves to live in far more places. Mech is the foremost wolf biologist in the world, with the National Biological Service, Laurel, MD, USA. (v6,#2)

Medeiros, Paul Joseph, Juxtaposing Aldo Leopold and Martin Heidegger: Interpretation, Time, and the Environment. Ph.D. thesis, Duke University. May, 2000. The concepts of authentic time, inauthentic time, and everyday time, articulated by Martin Heidegger in the 1924 lecture “The Concept of Time” and in Being and Time, are used to disclose American environmentalism as a tradition calling for a temporal modification of everyday life through engaged contact with the wild. The essays of conservationist Aldo Leopold, forerunner of contemporary environmental ethics, are chosen as representative of a tradition that includes Emerson, Thoreau, and Muir. The three main themes intrinsic to Leopold's essays—that our historical roots in the wild yield cultural values, that the whole of nature can be perceived as a community, and that we ought to respect and care for the land (the famous "land ethic")—are interpreted in terms of Heidegger's concepts of the authentic past, present, and future, respectively.

Issues of interpretation, specifically the linguistic and metaphysical obstacles to our understanding of Heidegger and the problem of a philosophical representation appropriate to Leopold and the American environmental tradition in general, are a major concern of the dissertation. These problems are unraveled by virtue of the dissertation's hermeneutical structure: Part I presents the evolution of the three themes in Leopold's essays leading up to their explicit formulation in A Sand County Almanac, Part II is a tripartite analysis of Heidegger's translated works from the 1966 Der Spiegel interview back to “The Concept of Time” guided by Leopold's themes, and Part III reinterprets Leopold's environmental philosophy, including the land ethic, in light of the results of Part II i.e., Heidegger's phenomenological conception of past, present, and future. The dissertation concludes that the possibility of authentically interpreting both Leopold and Heidegger in this circular manner is grounded in their common heritage in German Romanticism. Principal advisors were Alasdair MacIntyre and Gregory Cooper.

(v.11,#1)

Medina, Ada, "The artist on process and ethics," Ethics and the Environment 8 (no. 1, 2003):3-21. Interview with Ada Medina. The conceptual and material processes behind her work. Art and philosophy, politics, nature, aesthetics, and her own creative practices. Art as "negotiating an in-between space, a threshold of contingency and flux, where oppositions permeate each other." Work in environmental ethics and ecosophistry also aims to engage liminal spaces, including nature/culture, thought/action, and self/other. In art and philosophy, the most interesting and innovative work does not stop at describing such dualisms, and does not aim to transcend them. Instead, it directs attention to the complexity and relation within any seeming opposition. Why that project is compelling and important. Medina is an artist, Santa Fe, NM. (E&E)

Medina, Martin. The World=s Scavengers: Salvaging for Sustainable Consumption and Production. Walnut Creek CA: AltMira Press, 2007. Medina tells us that up to 2% of the urban population in developing countries survives by salvaging materials from waste for recycling, which represents up to 64 million scavengers in the world today. Despite these numbers, we know little about the impact of scavenging on global capitalism development. The author examines its historical evolution and its linkages with formal and informal sector productive activities in capitalist and non-capitalist societies in case studies from Mexico, Brazil, Colombia, Argentina, Egypt, the Philippines, and India. He attempts to debunk popular perceptions about scavenging, demonstrating that many widely-held beliefs are wrong: scavenging is not primarily the activity of the poor nor is it a strictly marginal activity; the economic impact of scavenging is significant and can increase industrial competitiveness; and scavenging can be compatible with
a sustainable waste management system. Scavenging represents an adaptive response to poverty, yet at the same time it can be a resource to cities, whose contributions should be recognized and understood.


Meeks, M. Douglas, God the Economist. Minneapolis: Fortress Books, 1989. 257 pages. North Americans live by the logic of the market. Value is determined by exchange in the marketplace. Everything becomes a commodity to be used and depleted, hoarded or cast away. When persons are valued for their exchange in the marketplace, insecurity and competitiveness result. Instead of loving one another, sharing with one another, nurturing the well-being of one another, we compete with one another, use one another, and discard one another. These are the perils of riches. Meanwhile, forty million people die every year from poverty's perils, the lack of food, shelter, health, education, and hope. (v8,#3)


the chapter on conservation ethics and values, see the Callicott entry below. This and Richard B. Primack, Essentials of Conservation Biology (also by Sinauer), see Newsletter, Fall 1993 are the two leading texts in the field. (v5,#2)


Meffert, Lisa Marie, "How Speciation Experiments Relate to Conservation Biology," Bioscience 49 (No. 9, 1999 Sep 01): 701-. The assumption of captive breeding strategies--that founder events reduce genetic variation--may not always be correct. (v.11,#4)


Meijboom, Franck L. B., Tatjana Visak and Frans W. A. Brom, "From Trust to Trustworthiness: Why Information is not Enough in the Food Sector," Journal of Agricultural and Environmental Ethics 19(2006):427-442. The many well-publicized food scandals in recent years have resulted in a general state of vulnerable trust. As a result, building consumer trust has become an important goal in agri-food policy. In their efforts to protect trust in the agricultural and food sector, governments and industries have tended to consider the problem of trust as merely a matter of informing consumers on risks. In this article, we argue that the food sector better addresses the problem of trust from the perspective of the trustworthiness of the food sector itself. This broad idea for changing the focus of trust is the assumption that if you want to be trusted, you should be trustworthy. To provide a clear understanding of what being trustworthy means within the food sector, we elaborate on both the concept of trust and of responsibility. In
this way we show that policy focused on enhancing transparency and providing information to consumers is crucial, but not sufficient for dealing with the problem of consumer trust in the current agri-food context. Keywords: food - food policy - responsibility - trust - trustworthiness. The authors are in the Ethiek Instituut, Utrecht University, Utrecht, The Netherlands. (JAEE)

Meijboom, Franck L. B., A Trust, Food, and Health. Questions of Trust at the Interface between Food and Health, @ Journal of Agricultural and Environmental Ethics 20(2007):231-245. The food sector and health sector become more and more intertwined. This raises many possibilities, but also questions. One of them is the question of what the implication is for public trust in food and health issues. In this article, I argue that the products on the interface between food and health entails some serious questions of trust. Trust in food products and medical products is often based upon a long history of rather clear patterns of mutual expectations, yet these expectations are not similar in both sectors. As long as the food sector and health sector remain distinct, these differences will not lead to problems of trust, yet when new products are introduced, like functional foods or personalized dietary advices, trust can be threatened. To prevent this, we need clarity with regard to what we can expect of these new products and of whom to expect what in this situation. This requires not only adequate information on operating procedures, but also a profound debate on responsibilities and the explication and interpretation of moral values and norms. Keywords: functional food - health - personalized dietary advice - trust - trustworthiness. Meijboom is at Ethics Institute, Utrecht University, Utrecht, Netherlands.


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. (v5,#4)


Meine, Curt, "The Reach of Words," Wild Earth 9(no. 3, Fall 1999):22. (v.11,#1)


Meine, Curt, "Conservation Movement, Historical," *Encyclopedia of Biodiversity* 1: 883-896. Modern efforts to conserve biodiversity have their foundations in older traditions of resource management and nature protection. This chapter traces the history of the conservation movement, focusing on those events and patterns that led to the emergence of biodiversity conservation from earlier utilitarian and preservation-oriented approaches. Because the conservation movement continues to redefine itself, this article concludes with a consideration of key themes from recent history. (v.11,#4)


Meiners, Roger E. and Bruce Yandle, eds. *Taking the Environment Seriously*. Lanham, MD: Rowman & Littlefield, 1993. 288 pages. $42.50. Essays argue that it is time to consider market-oriented solutions to environmental problems. (v5,#2)

Meiners, Roger E., and Yandle, Bruce, "The Common Law: How It Protects the Environment," PERC Policy Series, No. PS-13, May 1998. (PERC, 502 South 19th Avenue, Suite 211, Bozeman, MT 59718-6827). Common law cases, that preceded environmental regulation, were more successful than people usually think, and offer an alternative to still more government regulation. Meiners teaches economics and law at the University of Texas at Arlington. Yandle is in economics and legal studies, Clemson University. (v9,#2)


Mejia, Alfonso Alonso, Leeanne Tennant de Alonso, Lincoln Brower, and Dennis Murphy, "Maintaining Migratory Phenomena: The Mexican Monarch Butterfly Challenge," Society for Conservation Biology Newsletter 3 (special issue, May 1996):1, 17. The Monarchs winter in selected forests of Oyamel fir in Mexico, clustering in large groups in some eight or so areas. They need the protection of the forests to survive winter freezing, but forest destruction threatens their survival. Mexico has set aside a Monarch Butterfly Special Biosphere Reserve by presidential decree, though much of the reserve is private land, and only a portion of the reserve is fully protected. Logging is still permitted on much of it. Ways to combine butterfly protection and the economic needs of local peoples are reviewed. The authors, zoologists from
the University of Florida, Harvard, and Stanford, have been involved in intensive study of the problem. (v7,#2)

Melin, Anders, "Genetic Engineering and the Moral Status of Non-Human Species," Journal of Agricultural and Environmental Ethics 17(2004):479-495. Genetic modification leads to several important moral issues. Up until now they have mainly been discussed from the viewpoint that only individual living beings, above all animals, are morally considerable. The standpoint that also collective entities such as species belong to the moral sphere have seldom been taken into account in a more thorough way, although it is advocated by several important environmental ethicists. The main purpose of this article is to analyze in more detail than often has been done what the practical consequences of this ethical position would be for the use of genetic engineering on animals and plants. The practical consequences of the holistic standpoint (focused on collective entities) of Holmes Rolston, III, is compared with the practical consequences of the individualistic standpoints (focused on individual living beings) of Bernard E. Rollin and Philipp Balzer, Klaus Peter Rippe, and Peter Schaber, respectively. The article also discusses whether the claim that species are morally considerable is tenable as a foundation for policy decisions on genetic engineering. Key words: Balzer et al., genetic engineering, holistic ethical position, Rollin, Rolston. The author is at the Centre for Theology and Religious Studies, Lund University, Sweden. (JAEE)

Melis, Alicia P., Brian Hare, and Michael Tomasello, "Chimpanzees Recruit the Best Collaborators," Science 311 (3 March 2006): 1297-1300. Chimps will get help when it takes two to get the food (pulling on two ropes far apart) and they will unlock a door to get a helper, and, after experience, seek the most effective helper. Companion article is: Warnecken, Felix and Michael Tomasello, "Altruistic Helping in Human Infants and Young Chimpanzees," Science 311 (3 March 2006): 1301-1303.

Mellon, M., Biotechnology and the Environment: A Primer on the Environmental Implications. A publication of the National Wildlife Foundation, Biotechnology Policy Center, 1400 16th St., N. W. Washington, DC 20036. (v4,#1)

Mellor, Mary, Breaking the Boundaries: Towards a Feminist Green Socialism. London: Virago, 1992., 8.99. Green politics, ecofeminism, deep ecology, clan societies, global development, industrialism, capitalism, North and South and related women and environment issues. Women and their work is a central theme. Although socialism has rather consistently failed to respond adequately to the challenges of either feminism or environmentalism, a feminist green socialism is possible. Reviewed, rather negatively, by Julie Cook, Women's Environmental Network, in Environmental Values 3(1994):278-279. (v5,#3)

Mellor, Mary. "Feminism and Environmental Ethics: A Materialist Perspective." Ethics and the Environment 5(2000):107-124. ABSTRACT: There is a long-standing claim within feminist literature that women speak with a 'different voice' (Gilligan 1982), that it is both possible and desirable to have on ethics from the standpoint of women (Noddings 1990), that the standpoint of women is a better starting point for adequate knowledge of the world (Harding 1993). This claim is central to ecofeminist politics. that women have a particular perspective on the relationship between humanity and nature and have a moral/political calling to reweave the world (Diamond and Orenstein 1990) or heal the wounds of an ecologically destructive social order (Plant 1989). In this essay I will not be making the claim that women perse have a superior vision or a higher moral authority, but that (in ethics that does not take account of the gendered nature of society is doomed to failure as it will confront neither the material structure of human society or the way in which that structure impacts on the materiality of the relationship between humanity and nature. (E&E)


Melosi, Marvin V., "Equity, Eco-racism and Environmental History," *Environmental History Review* 19 (1995): 1-16. If the emergence of the Environmental Justice Movement shows us anything, it clearly demonstrates that the foundations of environmentalism laid twenty-five years ago are not unshakable; that the connection between environmental rights and civil rights has to be taken seriously. Melosi is at the University of Houston. (v6,#4)


Mench, Joy A., "Assessing Animal Welfare: An Overview", *Journal of Agricultural and Environmental Ethics* 6(1993), Supplement. Because of increasing public concern about the quality of life of farm animals, there has been a growing effort to develop rigorous and clearly interpretable scientific criteria for assessing animal welfare. The indicators which have commonly been used to assess welfare in farm animals are productivity, health, physiology and behaviour. Each of these indicators has advantages and disadvantages with regard to measurement and interpretation. One underlying problem is that it may be difficult or impossible to determine a norm or standard to which measures can be compared in an effort to evaluate welfare. Instead, it is necessary to direct attention to an understanding of the causal and functional aspects of behavioural and physiological events in animals. In this context, I discuss integrative research approaches which can be used to evaluate the emotional, motivational and cognitive factors affecting animal welfare. Mench is in the Department of Poultry Science, University of Maryland, College Park, MD 20742.


Menon, Surabi, et al, "Climate Effects of Black Carbon Aerosols in China and India," *Science* 297(27 September 2002):2250-2250. With commentary: Chameides, William L., and Bergin, Michael, "Soot Takes Center Stage," *Science* 297(27 September 2002):2214-2215. Carbon dioxide is still the principal globally significant greenhouse gas. But soot in the air, not a gas but a particulate, may also seriously perturb regional climate. Soot emission in China and India may be responsible for the increase in droughts in northeast China and flooding in southeast China in the summer observed in the last twenty years. Warming over northern Africa and cooling over the
Southern United States may also be involved. But measuring techniques for soot leave uncertainty. What this means for environmental policy (and ethics) is also uncertain. (v.13,#4)


Mepham, Ben, "Farm Animal Diseases in Context," *Journal of Agricultural and Environmental Ethics* 17(2004):331-340. This special issue is devoted to a series of papers that explore the ethical implications of epizootics, diseases affecting large numbers of farm animals. The aim is to consider the general context in which epizootics (like foot and mouth disease) and zoonoses (like avian flu) occur, and new approaches to animal husbandry by which they might be avoided in the future. Mepham is at the Centre for Applied Bioethics, University of Nottingham, UK. (JAEE)


Merchant, Carolyn, ed. *Radical Ecology: The Search for a Liveable World*. London and New York: Routledge, 1993. 288 pages. $ 49.95 cloth. In order to maintain a liveable world, we must formulate new social, economic, scientific, and spiritual approaches that will fundamentally transform human relationships with nature. Merchant analyzes the revolutionary ideas of visionary ecologists to bring environmental problems to the attention of the public and examines the problems, the ideas, the actions that will make society rethink, reconstruct, and reinvent its relationship with the non-human world in the search for a liveable world. (v4,#3)

Merchant, Carolyn, ed. *Ecology*. Atlantic Highlands NJ: Humanities Press, 1994. This, the fourth volume in a series "Key Concepts in Critical Theory" is designed for courses in environmental studies, politics, history, and philosophy. This explores the connections between the domination of nature and human beings as articulated by thinkers such as Adorno, Horkheimer, and Marcuse, and asks how current environmental philosophies propose to liberate both humans and nature. The relationships between domination and class society, hierarchy, human-centeredness, patriarchy, economics, religion, and science are discussed. Merchant is at the University of California, Berkeley. (v7,#1)


Merchant, Carolyn, ed., Major Problems in American Environmental History: Documents and Essays. Lexington, MA: D. C. Heath, 1993. 544 pages. American environmental history from pre-contact Indian times to the present, each illustrated by several primary source documents and essays. Specific regional concerns as well as larger cultural issues including the confrontation between nature and civilization in the nineteenth century. Conservation, pollution, and wilderness preservation. Many dozens of documents over four centuries from the past to the present. With an instructor's manual. Merchant is professor of environmental history at the University of California, Berkeley. (v3,#4)

Merchant, Carolyn, Ecological Revolutions: Nature, Gender, and Science in New England. Chapel Hill: University of North Carolina Press, 1989. Pp. xv, 379. Important work of environmental history from a pioneer in the field. Merchant explores the colonization of New England from 1600-1850 as an example of the ecological transformations that shaped the dominant world-view of the twentieth century. In this period the ideas of mechanization, market-production, patriarchy, and domination became the controlling aspects of human consciousness regarding nature. As Merchant writes in the preface, this work continues the discussion of the themes of her earlier book, The Death of Nature: "the roots of the environmental crisis, the roles of women in history, the change from nature as mother to nature as machine, and the place of science in the creation of the modern world" (p. xiii). Contains detailed appendices, notes, and bibliography. (Katz, Bibl # 2)


Merchant, Carolyn. "Environmental Ethics and Political Conflict: A View from California." Environmental Ethics 12(1990):45-68. I examine three approaches to environmental ethics and illustrate them with examples from California. An egocentric ethic is grounded in the self and based on the assumption that what is good for the individual is good for society. Historically associated with laissez faire capitalism and a religious ethic of human dominion over nature, this approach is exemplified by the extraction of natural resources from the commons by private interests. A homocentric ethic is grounded in society and is based on the assumption that policies should reflect the greatest good for the greatest number of people and that, as stewards of the natural world, humans should conserve and protect nature for human benefit. Historically associated with government regulation of the private sector, a homocentric approach can be illustrated by federal, state, and local environmental agencies charged with protecting the
welfare of the general public. An ecocentric ethic is grounded in the cosmos, or whole environment, and is based on the assignment of intrinsic value to nonhuman nature. Exemplified by ecologically based sciences and process-oriented philosophies, an ecocentric approach often underlies the political positions of environmentalists. This threefold taxonomy may be useful in identifying underlying ethical assumptions in cases where ethical dilemmas and conflicts of interest develop among entrepreneurs, government agencies, and environmentalists. Merchant is at the Department of Conservation and Resource Studies and Division of Biological Control, University of California, Berkeley. (EE)


Merchant, Carolyn. *American Environmental History: An Introduction*. New York: Columbia University Press, 2007. Merchant's illustrated environmental history begins with precolonial land-use practices of Native American Indians and ends with the global ecological crisis of the twenty-first century. She discusses issues such as slavery, the expulsion of native peoples from national parks, population growth, suburban sprawl, wilderness preservation, the environmental justice movement, globalization, and the formative forces of race, gender, and class.

Meretsky, VJ, et al., "New Directions in Conservation for the National Wildlife Refuge System," *BioScience* 56 (no. 2, February 2006): 135-143. The National Wildlife Refuge System Improvement Act of 1997 includes the nation's broadest statutory commitment to ecosystem protection: to "ensure that the biological integrity, diversity, and environmental health of the system are maintained." The act also directs the US Fish and Wildlife Service (FWS) to expand the scope of conservation monitoring, assessment, and management beyond refuge boundaries to encompass surrounding landscapes. The act thus gives the FWS a leadership role in developing research and management partnerships with other agencies, organizations, and neighboring landowners. Increasing research capacity and scientific expertise, and strengthening institutional resolve to limit activities that impede the attainment of this directive, are challenges for the FWS. Success requires reexamination of existing priorities, refocused training, the acquisition of new funding and technical expertise, etc.

Merkel, Angela, "The Role of Science in Sustainable Development," *Science* 282(1998):336-337. "If we are to move toward sustainable development, the industrialized communities will have to accept special responsibilities--not only because of their past ecological sins, but also because of their present technological know-how and financial resources." "Sustainability, as a strategic aim, involves optimizing the interactions between nature, society, and the economy, in accordance with ecological criteria." "In the long term, 'progress' works against us if it continues to be detrimental to nature. .. Environmental protection will play a central role in the 21st century and will be a major challenge for politicians and scientists alike." Merkel is a member of the German Parliament and Minister for the Environment, Nature Conservation, and Nuclear Safety. (v.9,#3)

Merlo, Maurizio, and Croitory, Lelia, eds., *Valuing Mediterranean Forests* New York: Oxford University Press, 2005. The authors are at the University of Padova, Italy.

Merrell, David J. *The Adaptive Seascape: The Mechanism of Evolution*. Minneapolis: University of Minnesota Press, 1994. 280 pages. $34.95. Hidden and often poorly founded assumptions of the synthetic theory of evolution are unraveled from the perspective of ecological genetics. Based on laboratory and field research. The metaphor of an "adaptive seascape" is proposed to replace Sewall Wright's well-known "adaptive landscape."


Metzner, Ralph, Green Psychology: Cultivating a Spiritual Connection with the Natural World. Inner Traditions International Ltd., 1999. Our ecocatastrophe results from the religions of Western civilization ceasing to be based on living harmoniously with the earth, and seeking dominion over nature instead of partnership. This created a pathology; we are disrespecting and destroying what sustains the human spirit. Deep ecology and ecofeminism are evidence of the human ability to return to the earth and bond spirit to nature. Metzner is a psychotherapist at the California Institute of Integral Studies, San Francisco. (v.10,#3)

Meyer-Abich, Klaus M. "Toward a Practical Philosophy of Nature." Environmental Ethics 1(1979):293-308. The application of the polluter-pays principle in environmental policy depends on answers to the philosophical questions about what is good or detrimental with respect to nature. Science and the economy constitute a functional circle of "observing" nature's unity as well as its utility. Based on a concept of nature as a system of causally related objects or--complementary to this--as a bunch of "resources," however, the human interest and responsibility in nature do not seem to be properly observed. Subjecting nature to human subjectivity may have been an adaptation in the wrong direction, since, if humanity is taken as the measure, there is no measure for humanity. A practical philosophy of nature should start from the assumption that science's missing unity and the economy's missing goodness are equivalent shortcomings in a complementary way. On the one hand, philosophy should engage in the problem-oriented reintegration of the sciences by establishing nuclei of interdisciplinary cooperation. We are relating ourselves to nature in a responsible way only when approaching nature as our own nature. On the other hand, while our technological faculties have reached a very high level of reliability and differentiation, we are definitely much less successful in recognizing goodness in economic "goods." This calls for demand education with respect to how human needs are to be brought to bear as demands on nature, a human relation to nature as well as natural relations between human beings, again depending on answers to philosophical questions. In the history of ideas, nature has declined from "the nature of things and beings" to "the things and beings of nature," or from being to beings. We will, however, never be able to judge what is good or bad with respect to nature if we do not from the outset start--pragmatically--with a normative concept of nature. Meyer-Abich is in the philosophy department, Universitat Essen, Essen, Germany. (EE)


Meyer, Gitte, "Journalism and Science: How to Erode the Idea of Knowledge," *Journal of Agricultural and Environmental Ethics* 19(2006):239-252. This paper discusses aspects of the relationship between the scientific community and the public at large. Inspired by the European public debate on genetically modified crops and food, ethical challenges to the scientific community are highlighted. This is done by a discussion of changes that are likely to occur to journalistic attitudes - mirroring changing attitudes in the wider society - towards science and scientific researchers. Two journalistic conventions - those of science transmission and of investigative journalism - are presented and discussed in relation to the present drive towards commercialization within the world of science: How are journalists from these different schools of thought likely to respond to the trend of commercialization? Likely journalistic reactions could, while maintaining the authority of the scientific method, be expected to undermine public trust in scientists. In the long term, this may lead to an erosion of the idea of knowledge as something that cannot simply be reduced to the outcome of negotiation between stakeholders. It is argued that science is likely to be depicted as a fallen angel. This may be countered, it is posited, by science turning human, by recognizing its membership of society, and by recognizing that such membership entails more than just commercial relations. To rethink its relationship with the public at large - and, in particular, to rethink the ideal of disinterested science - is an ethical challenge facing the scientific community. Keywords: authority - commercialization - disinterestedness - public sphere - science journalism - trust. Meyer is in the Danish Centre for Bioethics and Risk Assessment, Valby, Denmark, also the International Center for Business and Politics, Copenhagen Business School, Frederiksberg, Denmark. (JAEE)


Meyer, Judith L. *The Spirit of Yellowstone: The Cultural Evolution of a National Park*. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1996. 176 pp. $26.95 cloth. Meyer demonstrates how important the park's past was in shaping our contemporary perceptions of Yellowstone and identifies six major themes important to the Yellowstone experience. She argues that it is Yellowstone's persistent spirit of place that park managers should seek to preserve and to keep in mind alongside politics, economics, and science. (v8,#2)


Meyer, William B. *Human Impact on the Earth*. New York: Cambridge University Press, 1996. 248 pages. $69.95 cloth, $24.95 paper. At a level accessible to the educated lay reader, Meyer describes the changes human activities have produced in the global environment from 300 years ago to the present day. A comprehensive inventory of human impact in its varied forms on the oceans, atmosphere, and climate. (v7, #3)

Meyer-Abich, Klaus Michael. Revolution for Nature: From the Environment to the Connatural World. Cambridge: The White Horse Press, 1993. 145 pages. Translation by Matthew Armstrong of Aufstand für die Natur, Von der Umwelt zur Mitwelt, 1990. "What I recommend is a peaceful consumers' revolution." "We require ecological disobedience, if we are to accomplish more than the government thinks fit" (p. 21). Meyer-Abich combines anthropocentric and nonanthropocentric theories; it is neither the natural world nor the human world but the connatural world. We move from egocentricity to nepotism to anthropocentrism to mammalism to biocentrism to physiocentrism. Meyer-Abich is in the philosophy department, Universitat Essen, Essen, Germany. (v6,#3)

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. (v5,#4)


Mezey, Matthew K. N., Deep Ecology and Transpersonal Psychology: an Enlightening Confrontation?, Master's Thesis, Department of Philosophy, Lancaster University, September 199?. (v7,#1)

Mezey, Matthew K. N., Deep Ecology and Transpersonal Psychology: an Enlightening Confrontation?, Master's Thesis, Department of Philosophy, Lancaster University, September 199?.


Michael, Mark A., "What's In a Name? Pragmatism, Essentialism, and Environmental Ethics," Environmental Values 12(2003): 361-379. Essentialists like J. Baird Callicott have argued that one cannot have an environmental ethic unless one adopts the nonanthropocentric principle, which holds that things other than humans can be morally considerable in their own right, typically because they are thought to be intrinsically valuable. Pragmatists like Bryan Norton reject this; they claim that environmental ethics has no core or essence, and hence that the nonanthropocentric principle is not essential to an environmental ethic. Norton advances as an alternative the Convergence Hypothesis, which says that there are many different ways of justifying environmental principles and policies. In this paper I show that pragmatists and
essentialists are arguing past one another because they fail to note two crucial points. First, they often propose different accounts of which principles constitute an environmental ethic and so they disagree about which principles must be justified. The nonanthropocentric principle may be required to justify the principles that Callicott believe to be constitutive of an environmental ethic, but it may be unnecessary to justify those principles that pragmatists think are constitutive. Second, essentialists and pragmatists often overlook the distinction to be made between the adequacy of a justification and its epistemic or rhetorical preferability. The nonanthropocentric principle may not be needed to provide an adequate justification of the constitutive principles and judgements, but a justification that contains the nonanthropocentric principle might nevertheless be epistemically preferable. (EV)


Michael, Mark A., "To Swat or Not to Swat: Pesky Flies, Environmental Ethics, and the Supererogatory," Environmental Ethics 18(1996):165-180. A central thesis of biocentrism is that all living things have intrinsic value. But when conflicts arise between the interests of humans and other organisms, this claim often has counterintuitive consequences. It would be wrong, for example, to swat pesky flies. Some biocentrists have responded by positing a taxonomy of interests in which human interests justifiably supersede those of other living things. I express doubts about whether this maneuver can succeed, and suggest that even if it does, it then commits biocentrists to the claim that it is wrong not to harm living things, when doing so is necessary to advance nonbasic human interests, a position which runs counter to the biocentric attitude of respect for nature. As a result, biocentrists must adopt either a highly counterintuitive position or one that is contrary to their general outlook. I show that the introduction of the supererogatory may resolve not only this biocentric dilemma but other quandaries in environmental ethics. Michael teaches philosophy at Austin Peay State University, Clarksville, TN. (EE)

Michael, Mark A. "Environmental Egalitarianism and `Who Do You Save?' Dilemmas," Environmental Values 6(1997):307-326. ABSTRACT: Some critics have understood environmental egalitarianism to imply that human and animal lives are generally equal in value, so that killing a human is no more objectionable than killing a dog. This charge should be troubling for anyone with egalitarian sympathies. I argue that one can distinguish two distinct versions of equality, one based on the idea of equal treatment, the other on the idea of equally valuable lives. I look at a lifeboat case where one must choose between saving a human and saving a dog, and using the work of Peter Singer and Tom Regan, I show why equality understood as equal treatment does not entail that lifeboat cases are moral toss-ups. But the view that all lives are equally valuable does entail this, and so egalitarians should reject this alternative account of equality. The upshot is that egalitarians need to be more careful about distinguishing between these two versions of equality. The failure to insist on this distinction has led many to believe that egalitarianism generally has counter-intuitive implications when in fact only one version of egalitarianism has this problem. Department of Philosophy Austin Peay State University, Clarksville, TN 37044, USA. (EV)


Michael, Mark, "An Alternative to the Common Heritage Principle," Environmental Ethics 9(1987):351-371. An argument in favor of a modified Lockean principle of acquisition regarding unowned resources. Nations should be permitted to acquire resources they develop, as long as
there is some international mechanism to prevent overexploitation. This "limited Lockean" principle preserves fairness, freedom, and the maximization of the common good. (Katz, Bibl # 1)

Michael, Mark A., "Is It Natural to Drive Species to Extinction?" Ethics and the Environment 10(no. 1, 2005):49-66. Whether or not extinction caused by human activities is natural depends on which sense of the term "natural" is under consideration. Given one sense of that term which has some grip on the popular imagination, it is. This suggests that at a minimum environmentalists should be very careful about invoking "the natural" and related concepts such as "acting naturally" when they propose moral principles. I argue here for the stronger claim that the "natural" is either redundant and serves to obscure more than it brings to light, or that it is bound up with a picture of the world which is false, and so theoretically useless. Thus "the natural" can do no useful theoretical work in a completely developed environmental ethic. Michael is in philosophy, Austin Peay State University, Clarksville, TN. (Eth&Env)

Michael, Mark. "An Alternative to the Common Heritage Principle." Environmental Ethics 9(1987):351-71. Many valuable natural resources are found outside current territorial limits, for example, on the Moon and in the deep sea. As technology advances, these resources become more accessible. I argue that the claim that all humanity owns these resources is insupportable if taken literally. Because they are truly unowned, we need to develop a principle of justice in acquisition which describes the procedure that must be followed to obtain property rights to these unowned objects. I conclude with a tentative development of such a principle based on the moral ideals of fairness, freedom, and the maximization of the common good. Michael is in the philosophy department, State University of New York, Albany, NY. (EE)

Michael, Mike, and Robin Grove-White. "Talking about Talking about Nature: Nurturing Ecological Consciousness." Environmental Ethics 15(1993):33-47. The increasing effort, both lay and academic, to encourage a transition from an "I-It" to an "I-Thou" relation to nature is located within a typology of ways of "knowing nature." This typology provides the context for a particular understanding of human conversation which sees the relation as a cyclical process of "immersion" and "realization" from which a model of the dialectic between "I-It" and "I-Thou" relations to nature can be developed. This model can be used to identify practical measures that can be taken as first steps toward a balance between these relations, both in general and in the context of science-oriented nature conservation organizations such as English Nature in Britain (formerly, the Nature Conservancy Council). Michael is at the School for Independent Studies, Lancaster University, Lancaster, U.K. Grove-White is at the Centre for the Study of Environmental Change, Lancaster University, Lancaster, U.K. (EE)


Michaelowa, A., "Review of: Urs Luterbacher and Detlev Sprinz (Eds.), International Relations and Global Climate Change," Environmental Politics 12(no. 1, 2003): 259. (v 14, #3)


Michaels, Sarah, Mason, Robert J. and Solecki, William D., "The importance of place in partnerships for regional environmental management," Environmental Conservation 26(no. 3, Sept 01 1999):159-. (v.11,#1)


Michnowski, L., Jak y Ekorozwój albo..., (How to Live? Ecodevelopment or...), Wydawnictwo Ekonomia i rodowisko (Economy & Environment Publishers), Bialystok, 1995. (v.13,#1)


Mickey, Adrian, Moral Responsibility: A Case Study in Investment Banking, Master's Thesis, Department of Philosophy, Lancaster University, September 1991. (v7,#1)

Middleton, Harry, "A Sense of Place," Southern Living, March 1990, pages 106-113. The South's past depended on its land. Now, in a very different sense, so does its future. A plea for environmental conservation and sensitivity to the landscape in the rapidly growing U. S. South, faced with frequent environmental degradation. (v2,#1)


Middleton, Neil, Phil O'Keefe, and Sam Mayo, Tears of the Crocodile: From Rio to Reality in the Developing World. Nairobi: East African Educational Publishers, 1993. ISBN 9966 46 584 4. 228 pages. This is a critique of those in the developed North who have failed to identify the links between poverty and environmental destruction. The real agenda at Rio was preserving the interests of the developed North both at the expense of the developing South and of the natural world. Middleton is a publisher in Dublin; O'Keefe is in environmental management at the University of Northumbria; Moyo is with the Zimbabwe Institute of Development Studies. (v6,#3)


Midgley, Mary, "Beasts Versus the Biosphere?" Environmental Values Vol.1 No.2(1992):113-122. ABSTRACT: Apparent clashes of interest between `deep ecologists' and `animal liberationists' can be understood as differences in emphasis rather than conflicts of principle, although it is only too easy for campaigners to regard as rivals good causes other than their own. Moral principles are part of a larger whole, within which they can be related, rather than absolute all-purpose rules of right conduct. This is illustrated using the practical dilemma which often occurs in conservation management, of whether or not to cull animals that are damaging
their habitat by overgrazing. Here, and in general, when we are faced with a choice between two evils, the need for scrupulous discrimination and honesty cannot be overstated; but it is not a worthy option to retreat behind moral principles of limited application. KEYWORDS: Culling, habitat-management, moral dilemmas, moral judgement. 1A Collingwood Terrace, Newcastle-on-Tyne NE2 2JP, UK.

Midgley, Mary, The Ethical Primate. New York: Routledge, 1994, paper 1996. 193 pages. Scientists and philosophers find it difficult to understand how each human being can be both a living part of the natural world and at the same time a genuinely free agent. Various responses to this paradox analyzed. Our evolutionary origin, properly understood, explains why human freedom and morality have come about. Midgley was formerly Senior Lecturer in philosophy at the University of Newcastle upon Tyne, UK.

Midgley, Mary, "Visions, Secular and Sacred," The Hastings Center Report (no. 5, September, 1995): 20-- . An imaginative vision of life as a whole is a central part of our mental equipment for any serious study; we must be careful what vision we espouse. If science is not furnished with a sensible one, it cannot fail to gather a wild one. (v6,#4)


Midgley, Mary, "Sustainability and Moral Pluralism," Ethics and the Environment 1(no.1, 1996):41-54. Discussions of environmental ethics, and of applied ethics generally, easily produce a sense of unreality. But they are not a luxury. Faced with a new and monstrous predicament, we do need new thinking. Enlightenment morality, on which we still largely rely, has had enormous merits, but it strongly tends towards egoism and social atomism. This makes it hard for us to think, as we now must, about larger wholes. Midgley taught philosophy at the University of Newcastle upon Tyne, U.K. (E&E)


Mies, Maria and Vandana Shiva. Ecofeminism. London: Zed Books, 1993. 328 pages, $19.95. Mies, a German social scientist, and Shiva, an Indian physicist, provide a critique of prevailing economic theories, conventional concepts of women's emancipation, and the myth that "the good life" can only be reached by catching up to Europe, North America, and Japan on an identical path of industrialisation, technological progress, and capital accumulation. (v6,#1)


Mighetto, Lisa, *Wild Animals and American Environmental Ethics* (Tuscon: University of Arizona Press, 1991). $35.00 cloth, $ 17.95 paper. A historical study of the roots of present attitudes. Americans now stand at a critical point in wildlife protection with inherited attitudes that are only partially adequate to meet the crisis. Mighetto teaches environmental and western history at the University of Puget Sound. (v2,#2)


Milbrath, Lester W., *Learning to Think Environmentally, While There Is Still Time*. Albany, NY: State University of New York Press, 1996. The survival of planet Earth's nourishing life systems ultimately depends on how we humans think about them. Unfortunately, our culture's assumptions about the way the world works ignore recent scientific understanding of life systems. A new way of thinking in public discourse is needed that understands the interdependency and delicate balance of biological, geological, and chemical systems as environmental scientists now understand them. Milbrath directs the Research Program in Environment and Society, State University of New York, Buffalo. (v7,#2)

Milbrath, Lester W., "Redefining the Good Life in a Sustainable Society." *Environmental Values* Vol.2 No.3(1993):261-270. ABSTRACT: The good life, as practiced in modern society, not only is unsustainable but also is frequently not really good. Quality in living is necessarily subjective, it cannot be defined in physical terms, and can be found in many manifestations. The search for quality is conducted within ourselves and not in a shopping mall. Several suggestions for modes of living that provide quality but do not burden or injure ecosystems are presented. The condition of life systems on our planet demand that we cultivate simple lifestyles that are inwardly rich. KEYWORDS: Quality of life, sustainable society, voluntary simplicity, the good life. Department of Sociology, State University of New York, Buffalo, NY 14620, USA.

Milbrath, Lester W., *Envisioning a Sustainable Society: Learning our Way Out* (Albany: State University of New York Press, 1989. $ 18.95 paper; $ 57.50 hardcover. 400 pages. Sample chapters: ecosystem viability, sustaining our food supply, work that is fulfilling in a sustainable society, enjoying life without material indulgence, science and technology in a sustainable society, a governance structure designed to help a society learn how to become sustainable, one biosphere but a fragmented world. Milbrath teaches political science and sociology at the State University of New York at Buffalo. (v3,#1)


Millar, Kate, et al., ADeveloping the Ethical Delphi,.@ Journal of Agricultural and Environmental Ethics 20(2007):53-63. A number of EU institutions and government committees across Europe have expressed interest in developing methods and decision-support tools to facilitate consideration of the ethical dimensions of biotechnology assessment. As part of the work conducted in the EC supported project on ethical tools (Ethical Bio-TA Tools), a number of ethical frameworks with the potential to support the work of public policy decision-makers has been characterized and evaluated. One of these potential tools is the Delphi method. The Delphi method was originally developed to assess variables that are intangible and/or shrouded in uncertainty by drawing on the knowledge and abilities of a diverse group of experts through a form of anonymous and iterative consultation. The method has hitherto been used by a diversity of practitioners to explore issues such as technology assessment, environmental planning, and public health measures. From the original (classical) Delphi, a family of Delphi-related processes has emerged. As a result of the evaluation of the various Delphi processes, it is proposed that the classical method can be further developed and applied as a form of ethical framework to assist policy-makers. Through a series of exercises and trials, an Ethical Delphi has been developed as a potential approach for characterizing ethical issues raised by the use of novel biotechnologies. Advantages and disadvantages of the method are discussed. Further work is needed to develop the procedural aspects of the Ethical Delphi method and to test its use in different cultural contexts. However, utilizing an ethical framework of this type combines the advantages of a methodical approach to capture ethical aspects with the democratic virtues of transparency and openness to criticism. Ethical frameworks such as the Ethical Delphi should contribute to better understanding of and decision-making on issues that involve decisive ethical dimensions. Keywords: ethical frameworks - biotechnology - Delphi method - GM fish - Ethical Delphi. The authors are at the Centre for Applied Bioethics, School of Biosciences, University of Nottingham, Sutton Bonington Campus, Loughborough, Leicestershire, UK.

Millar, Kate, and Sandy Tomkins, AEthical Analysis of the Use of GM Fish: Emerging Issues for Aquaculture Development,.@ Journal of Agricultural and Environmental Ethics 20(2007):437-453. Improvements in production methods over the last two decades have resulted in aquaculture becoming a significant contributor to food production in many countries. Increased efficiency and production levels are off-setting unsustainable capture fishing practices and contributing to food security, particularly in a number of developing countries. The challenge for the rapidly growing aquaculture industry is to develop and apply technologies that ensure sustainable production methods that will reduce environmental damage, increase productivity across the sector, and respect the diverse social and cultural dimensions of fish farming that are observed globally. The aquaculture industry currently faces a number of technology trajectories, which include the option to commercially produce genetically modified (GM) fish. The use of genetic modification in aquaculture has the potential to contribute to increased food security and is claimed to be the next logical step for the industry. However, the potential use of these technologies raises a number of important ethical questions. Using an ethical framework, the Ethical Matrix, this paper explores a number of the ethical issues potentially raised by the use of GM technologies in aquaculture. Several key issues have been identified. These include aspects of distributive justice for producers; use of a precautionary approach in the management of environmental risk and food safety; and impacts on the welfare and intrinsic value of the fish.
There is a need to conduct a comparative analysis of the full economic cycle of the use of GM fish in aquaculture production for developing countries. There is also a need to initiate an informed dialogue between stakeholders and strenuous efforts should be made to ensure the participation of producers and their representatives from developing nations. An additional concern is that any national licensing of the first generation of GM fish, i.e., in the USA, may initiate and frame an assessment cycle, mediated by the WTO, which could dominate the conditions under which the technology will be applied and regulated globally. Therefore, an integrated analysis of the technology development trajectories, in terms of international policy, IPR, and operational implications, as well as an analysis of a broader range of ethical concerns, is needed. Millar and Tomkins are at the Centre for Applied Bioethics, School of Biosciences, University of Nottingham, UK.

Millard, Frances. "Environmental Policy in Poland." Environmental Politics 7(no.1, Spring 1998):145- . (v10,#4)


There is a massive website: http://maweb.org. Various presentations are available there and can be downloaded, including some in PowerPoint. Also a World Health Organization spinoff: Ecosystems and Human Well-Being: Health Synthesis. Another one is Ecosystems and Human Well-Being: Wetlands and Water Synthesis. Yet another is Ecosystems and Human Well-Being: Opportunities and Challenges for Business and Industry. A basic framework is to classify ecosystem services into four categories: (1) Supporting Services, those that result directly from ecosystem functioning, such as nutrient cycling and primary production. (2) Provisioning Services, the products obtained directly such as food, fresh water, fuel wood. (3) Regulating Services, such as climate regulation, erosion control, control of pests and diseases, often viewed as "free" services. (4) Cultural Services, nonmaterial benefits such as cultural heritage values, sense of place, spiritual and inspirational values. An earlier publication is: Ecosystems and Human Well-Being: A Framework for Assessment. Washington: Island Press, 2003. Co-editors Harold Mooney, Angela Cropper.

The Millennium Ecosystem Assessment leaders won the million dollar Zayed Prize, funded by the crown prince of Dubai. Half of it went to United Nations Secretary-General Kofi Annan for his championing the project; $ 300,000 to the project itself, and $ 200,000 to panel co-chairs Angela Cropper and Emil Salim, the former Indonesian environmental minister. Kofi Annan will use his prize money to establish a foundation to promote agriculture and women's education in Africa. Science 311 (17 February 2006): 949.


Miller, B; Conway, W; Reading, RP; Wemmer, C; Wildt, D; Kleiman, D; Monfort, S; Rabinowitz, A; Armstrong, B; Hutchins, M, "Evaluating the Conservation Mission of Zoos, Aquariums, Botanical Gardens, and Natural History Museums", *Conservation Biology* 18 (no.1, 2004): 86-93.


Miller, Alan S., *Gaia Connections: An Introduction to Ecology, Ecoethics, and Economics* (Savage, MD: Rowman and Littlefield, 1991). 288 pages, $17.95 paper; $52.25 hardcover. Whether or not the Gaia hypothesis holds up within the formal boundaries of the earth sciences, it is metaphysically correct. Until we come to think of the Earth as a complex, fecund, self-sustaining organism, we will have difficulty moving beyond the shallowest levels of ecology. Chapters on environmental ethics, the moral demand of the steady state, bioethics, economics as if nature mattered, the social sources of environmental values, ecoethics and modern war, and much more. Miller is at the University of California, Berkeley. (v2,#1)


Miller, Charles A., *Jefferson and Nature: An Interpretation*. Baltimore: Johns Hopkins University Press, 1988. 300 pages. The first comprehensive study to take Thomas Jefferson at his word--his favorite word. *Nature*--the term and the many ideas associated with it--pervades Jefferson's life and writings. It sets him apart from his colleagues in the American Enlightenment and provides the distinctive gateway to this thought and action. By no means consistent and at times apparently opportunistic in his use of the term, Jefferson nevertheless draws nearly every realm of life back to this essential word and idea. Miller teaches politics at Lake Forest College, Lake Forest, Illinois. (v8,#3)
Miller, Chris, "Attributing Priority to Habitats," Environmental Values 6(1997):341-353. ABSTRACT: A close scrutiny of a European Community directive on habitats and of the statutory instrument by which it is implemented in Britain reveals small but nevertheless significant concessions towards an ecocentric approach. Planning law now allows interference in the habitats of protected species only when human interests are demonstrably overriding. Recent decisions of the European Court of Justice have given a very restrictive interpretation of the circumstances in which such interference may be permitted. The implications for further ecocentric influence in environmental law are discussed. European Studies Research Institute, University of Salford, Salford, M5 4WT, UK. (EV)

Miller, Clark A. and Edwards, Paul N., ed., Changing the Atmosphere: Expert Knowledge and Environmental Governance. Cambridge, MA: MIT Press, 2001. The contributors argue that in the current debate about global warming the distinction between science and policy is almost absent. Environmental "science's place in global policymaking is increasingly formalized, boosting its authority in policymaking processes but also subjecting it to new forms of political and legal oversight and review. International expert institutions such as the IPCC (Intergovernmental Panel on Climate Change) increasingly determine which knowledge counts and which does not, helping to shape crucial policy outcomes" (Miller and Edwards, introduction). Meanwhile, climate models have more uncertainty by far than weather models and we do not know enough about historical climate changes over the millennia to make good predictions. Contains: -Jamieson, Dale, "Climate Change and Global Environmental Justice," pp. 287-307. Scientific knowledge and conceptions of justice. Two views of global environmental justice, and a proposal for the distribution of emissions permissions embodying concerns about justice. But its adoption is unlikely, and the likely outcomes are more unjust. (v.13,#1)

Miller, Clark A. "The Dynamics of Framing Environmental Values and Policy: Four Models of Societal Processes." Environmental Values 9(2000):211-233. Abstract: While the subject of framing has achieved considerable recognition recently among social scientists and policy analysts, less attention has been given to how societies arrive at stable, collective frames of meaning for environmental values and policy. This paper proposes four models of societal processes by which framing occurs: narration, modelling, canonisation and normalisation. These four models are developed, compared, and explored in detail through a case study of the framing of the impacts of climate change on human societies in US science policy from the 1960s through the 1990s. I conclude by offering a number of potentially fruitful avenues for further research into the dynamics of framing. Keywords: Framing, climate change, environmental values, environmental policy. Clark A. Miller is in the Department of Political Science, Iowa State University, 515 Ross Hall, Ames, IA 50011, USA. (EV)

Miller, Elaine P., ""The World Must be Romanticised ...": The (Environmental) Ethical Implications of Schelling's Organic Worldview," Environmental Values 14(2005): 295-316. This essay addresses the implications of German Idealism and Romanticism, and in particular the philosophy of Schelling as it is informed by Kant and Goethe, for contemporary environmental philosophy. Schelling’s philosophy posits a nature imbued with freedom which gives rise to human beings, which means that any ethics, insofar as ethics is predicated upon freedom, will be an "environmental ethic". At the same time, Schelling's organismic view of nature is distinctive in positing a fundamental gap between nature and human beings. Without this absolute alterity, there could be no real ethical relationship between human beings and nature. I conclude by briefly gesturing toward Schelling’s role in the development of an ethics of alterity (which I apply to environmental ethics) in continental philosophy through Heidegger, Derrida, and Levinas. Miller is in philosophy, Miami University, Oxford, OH. (EV)
Miller, Gifford H., "Ecosystem Collapse in Pleistocene Australia and a Human Role in Megafaunal Extinction," *Science* 309(8 July 2005):287-290 and commentary 255-256. The arrival of humans in the Americas after the ice ages coincides, more or less, with some megafaunal extinctions, but it is difficult to separate climate change from human hunting as a cause. Australia had no such ice ages and it had had humans much longer (c. 11,000 vs. 45,000 years). Coinciding with human arrival there, more or less, one larger flightless bird went extinct (*Genyornis*) and another did not (the emu, continuing to the present. The authors find a sudden change in emu diet at the time of human arrival, shifting from mostly photosynthetic C3 plants (shrubs, trees, herbs) to C4 plants (grasses). The authors surmise that the change from woodlands to grassland was caused by humans lighting fires and that *Genyornis* could not adapt to this change but that the emu could. If so, this is one of the few widespread ecosystem changes attributable to aboriginal peoples. One problem: no charcoal records exist for this region.


Miller, Harlan B. and William H. Williams, eds., *Ethics and Animals*. Clifton, New Jersey: Humana, 1983. Pp. xii, 400. This is not an important book for those interested in environmental ethics. Even the few articles that deal with environmental issues seem dated—perhaps because the conference in which these papers were presented was held in 1979. The only article of real interest is Peter S. Wenz, "Ecology, Morality, and Hunting" (pp.183-197). Wenz argues that we have obligations to ecosystems, not just to humans or other sentient beings. He then claims that we can use this obligation to limit the practice of hunting. (Katz, Bibl # 1)


Miller, Jonathan, "Australian Approaches to Wilderness," *International Journal of Wilderness* 1(no. 2, December):38-39. Six of the eight Australian states, plus the Australian Commonwealth Territory, have wilderness legislation. Some wilderness initiatives are also undertaken at the national level, especially the National Wilderness Inventory. Miller is with the Australian Heritage Commission, Canberra. (v7,#1)

Miller, Joseph A., Sarah M. Friedman, David C. Grigsby, and Annette Huddle, compilers, *The Island Press Bibliography of Environmental Literature*. Washington, DC: Island Press, 1993. 396 pages. Hardbound, $ 48. 3,084 entries, includes a section on "Ethics, Philosophy, and Religion." The authors are with the Yale School of Forestry and Environmental Studies. (v4,#2)

Miller, JR; Turner, MG; Smithwick, EAH; Dent, CL; Stanley, EH, "Spatial Extrapolation: The Science of Predicting Ecological Patterns and Processes", *BioScience* 54 (no.4, 2004): 310-320(11). Ecologists are often asked to contribute to solutions for broadscale problems. The extent of most ecological research is relatively limited, however, necessitating extrapolation to broader scales or to new locations. Spatial extrapolation in ecology tends to follow a general framework in which (a) the objectives are defined and a conceptual model is derived; (b) a statistical or simulation model is developed to generate predictions, possibly entailing scaling functions when
extrapolating to broad scales; and (c) the results are evaluated against new data. In this article, we examine the application of this framework in a variety of contexts, using examples from the scientific literature. We conclude by discussing the challenges, limitations, and future prospects for extrapolation.


Miller, Lantz, "Filling the Gaps in the Risks vs. Benefits of Mammalian Adult-Cell Cloning: Taking Bernard Rollin's Philosophy Its Next Step," Journal of Agricultural and Environmental Ethics 11(1998):1-16. ABSTRACT. A critique is made of Bernard Rollin's examination of the ethics of cloning adult mammalian cells. The primary concern is less to propound an anticloning or pro-cloning position than to call for full exploration of the ethical complexities before a rush to judgment is made. Indeed, the ethical examination in question rushes toward an ethical position in such a way that does not appear consistent with Rollin's usual methodology. By extending this methodology - which entails full weighing of benefits and costs - it becomes apparent that there are real potential risks to this type of cloning in both animals and humans, besides the possible benefits, and that the scientific, political, philosophical, and broader academic communities should explore these risks and benefits extensively. Rollin's usual methodological call for hesitation before risks would translate into hesitation before the ethical risks of adult mammalian cell cloning instead of his paper's curiously laissez-faire stance. KEY WORDS: animal adult-cell cloning, human adult-cell cloning, genetic ecology, genetic monoculture, synchronic genetic diversity, diachronic genetic diversity, rights of future generations. (JAEE)


Miller, Mara, The Garden as an Art. Albany: SUNY Press, 1993. 273 pages. Paper, $ 18.95. Theoretical issues in aesthetics that gardens raise, with examples. Miller challenges contemporary aesthetic theory to include gardens in an expanded definition of art. Gardens mix art and nature in varying proportions. She challenges the idea that art should be studied within the context of a single culture and period, the idea that art should be conceived as a discrete object unrelated to our survival as persons, as cultural communities, and as a species. She challenges the idea that all signifying systems are like language use. The element of nature in gardens is part of this challenge. Miller is director of the Asian Studies Program and teaches philosophy at Drew University. (v5,#2)

Miller, Pamela A., The Implications of John Dewey's Ideas for Environmental Ethics (Pragmatism), 1998, Indiana University, Ph.D. thesis. 515 pages. Dewey's pragmatism identifies and addresses conflicts between human and nonhuman interests that can help bridge the gap between practice and theory in environmental ethics. Traditional arguments in environmental ethics often give little or no guidance in conflicts faced in practice. Dewey's philosophy offers an alternative that gives direction to practitioners for resolving conflicts so that all parties to a conflict 'grow' as a result of the conflict. This requires focus on the notions of inquiry, experience, growth, the idea of character in moral judgment, and Dewey's concept of the "good". A Deweyan approach to environmental ethics lends support to major claims of the ecofeminists. The advisor was Karen Hanson. (v.10,#1)

Miller, Peter, "The Place of Recycling in Sustainable Development," A Manitoba New Democratic Party Environmental Task Force Report. The fifty page study examines the feasibility of recycling in the province of Manitoba, with attention to combining theory and practice. Copies available on request. Department of Philosophy, University of Winnipeg, 515 Portage Avenue, Winnipeg, Manitoba R3B 2E0, Canada. (v1,#1)
Miller, Peter, "Descartes' Legacy and Deep Ecology." Dialogue 28 (1989): 183-202. An argument for an axiology of "extended naturalism." This view is contrasted with a pure Cartesian separation of value from the material world and with a modified Cartesian "projectionist" axiology that insists value must be based in the mind of a conscious evaluator. Projectionism is in "the firm grip of the Cartesian legacy" because "not only the appreciation but also the very existence of those values `within' the non-human natural order [are] contingent upon human altruistic sentiments, value experiences, or evaluations" (p. 194). The mistake is the confusion of "epistemic primacy with ontological primacy" (p. 199). (Katz, Bibl # 2) (v1,#1)


Miller, Peter. "Do Animals Have Interests Worthy of Our Moral Interest?" Environmental Ethics 5(1983):319-33. The conclusion of animal liberationists that the underlying assumptions of modern egalitarian humanism can be construed to imply an equal moral desert for the higher nonhuman animals has recently been challenged by R. G. Frey on the grounds that linguistic incompetence and lack of self-consciousness on the part of animals preclude them from having desires, beliefs, interests, and rights. Although Frey's arguments fail, they challenge us to provide alternative accounts of these descriptive and normative categories of human and animal psychology. Phenomenological and behavioral analyses demonstrate both the meaningfulness and the truthfulness of attributing desires, beliefs, and interests to many nonhuman animals. Principles of axiology and ethics prescribe that animal interests ought to be objects of our moral concern, but do not vindicate an egalitarian interpretation of animal liberation. A fundamental challenge of the animal liberation debate is how to frame a nonegalitarian ethic that can nevertheless preserve the moral gains of various liberation movements inspired by principles of equality. Miller is in the philosophy department, University of Winnipeg, Winnipeg, Canada. (EE)

Miller, Peter. "Value as Richness: Toward a Value Theory for the Expanded Naturalism in Environmental Ethics." Environmental Ethics 4(1982):101-14. There is a widespread conviction amongst nature lovers, environmental activists, and many writers on environmental ethics that the value of the natural world is not restricted to its utility to humankind, but contains an independent intrinsic worth as well. Most contemporary value theories, however, are psychologically based and thus ill-suited to characterize such natural intrinsic value. The theory of "value as richness" attempts to articulate a plausible nonpsychological theory of value that accommodates environmentalist convictions as well as more traditional value concerns. It has implications not only for our care for and preservation of nature, but also for the enrichment of human lives. Miller is in the philosophy department, University of Winnipeg, Winnipeg, Canada. (EE)


Suggestions made by Luce Irigaray in her book, An Ethics of Sexual Difference, may offer a solution to a problem in environmental ethics which has much in common with the gender problem: the tendency of the masculine to exploit the Other as "a-place-to-be-in." If humans are to achieve the ethicality of mutually beneficial, sustainable relating with all beings, we need to initiate an economy of desire which has regard to a reciprocity of receptivity-activity, as a way of safeguarding a clear space open to the kind of relating that makes possible a "permanent becoming" together of all beings. We need to live in a psychic No-Place, to experience our environment as the potentially infinite "Open" of "our-between." (EE)

Milton, Kay, ed. *Environmentalism: The View from Anthropology*. London: Routledge, 1993. 240 pages. 14.99 paper. Stressing the cultural dimensions of green issues, the contributors maintain that anthropology has a distinctive contribution to make to the ecological debate. Milton is in social anthropology at the Queen's University, Belfast. (v6,#1)


Milton, Kay, *Environmentalism and Cultural Theory: Exploring the Role of Anthropology in Environmental Discourse*. New York: Routledge, 1996. Environmentalists often claim that non-industrial societies, usually described as "indigenous" or "traditional," have a better relationship with their environment than industrial societies do. A growing body of anthropological literature has thrown doubt on this belief, and suggests that it should be seen as a "myth," both in the popular sense of something that is untrue and in the sense often used by anthropologists as something that is asserted as dogma. Our contemporary understanding of these cultures is shaped by our pre-conceptions and by the arguments we wish to pursue. Both the reality of human-environment relations, and our interpretations of them, are considerably more complex than the environmentalist myth suggests. Milton teaches social anthropology at the Queen's University, Belfast. (v8,#3)

Milton, Kay, *Environmentalism and Cultural Theory: Exploring the Role of Anthropology in Environmental Discourse*. London: Routledge, 1996. "The position that human beings are unique in possessing culture has always seemed an absurd denial both of experience and of logic" (pp. 63-64). "The myth of primitive ecological wisdom is not well founded" (p. 133). (v10,#4)

Milton, Kay, *Environmentalism and Cultural Theory: Exploring the Role of Anthropology in Environmental Discourse*. London: Routledge, 1996. "The position that human beings are unique in possessing culture has always seemed an absurd denial both of experience and of logic" (pp. 63-64). "The myth of primitive ecological wisdom is not well founded" (p. 133). (v.11,#1)

Milton, Kay. "Nature is Already Sacred." *Environmental Values* 8(1999):437-449. ABSTRACT: Environmentalists often argue that, in order to address fundamentally the harmful impact of their activities on the environment, western industrial societies need to change their attitude to nature. Specifically, they need to see nature as sacred, and to acknowledge that humanity is a part of nature rather than separate from it. In this paper, I seek to show that these two ideas are incompatible in the context of western culture. Drawing particularly on ideas expressed by western conservationists, I argue that nature is already seen as sacred, and that its sacredness depends on it being seen as separate from humanity, an idea which effectively contradicts the scientific knowledge on which many conservationists base their actions. Goodin's green theory of value is used as a source of ideas about why non-human nature is experienced as sacred, and can be extended to suggest that other values, such as "development" and "progress", are also seen as sacred. KEYWORDS: Nature, sacredness, conservation, non-human nature, western culture. Kay Milton, School of Anthropological Studies The Queen's University of Belfast Belfast BT7 1NN, Northern Ireland Email: kmilton@clio.arts.qub.ac.uk. (EV)

Minai, Asghar Talaye, *Aesthetics, Mind, and Nature: A Communication Approach to the Unity of Matter and Consciousness*. Westport, CT: Praeger, 1993. "The totality of cosmic order bears messages of meaning and is 'beautiful'. The properties of this system may fall in either rational or random order, the former promoting well-ordered, rule-generated, sociobiological conditions, but the latter providing the necessary complexity and variety that transforms the mundane into the beautiful. ... This book aims to satisfy the urge for better understanding of the underlying principle of beauty and the nature of what is beautiful (p. xvi). (v7,#2)


Minckley, Wendell L. and James E. Deacon, eds., *Battle Against Extinction: Native Fish Management in the American West* (Tuscon: University of Arizona Press, 1991), $ 40.00 cloth. Nearly a third of the native fishes of North America live in the arid West; nearly all are threatened or of concern. Holmes Rolston contributes an article on duties to endangered fishes. Minckley is professor of zoology at Arizona State University. Deacon is professor of biology at the University of Nevada, Las Vegas. (v2,#2)

Minckley, W. L. and James E. Deacon, eds., *Battle against Extinction: Native Fish Management in the American West*. Tuscon: University of Arizona Press, 1992. Includes, "Fishes in the Desert: Paradox and Responsibility" by Holmes Rolston; articles by Phil Pister, James Deacon, and others on fish conservation in the American West. $ 40.00. (v2,#4)


Mineau, Pierre, McLaughlin, Alison. "Conservation of Biodiversity Within Canadian Agricultural Landscapes: Integrating Habitat for Wildlife," *Journal of Agricultural and Environmental Ethics* 9(1996):93-113. This review of current literature considers the potential for non-crop areas within agricultural landscapes to be reservoirs of agronomically beneficial organisms including plants, invertebrates, and vertebrate species. Non-crop habitats adjacent to crop land have been identified as significant for the maintenance of plant species diversity, for the conservation of beneficial pollinating and predatory insect and as essential habitat for birds. A key component for enhancement of biodiversity is the reintroduction of landscape heterogeneity by (1) protection and enhancement of key non-crop areas, (2) smaller fields and farms, and (3) a greater mixture of crops, through rotation, intercropping and regional diversification. The benefits of increased biodiversity within arable lands are reviewed for various species groups. The problems of crop depredation by vertebrate species, weed and insect competition are also discussed. Keywords: biodiversity, wildlife habitat, agriculture, hedgerows, field margins. Mineau and McLaughlin are with the Canadian Wildlife Service, Hull, Quebec. (JAEE)


Minion, Chris, "Publicly Funded Scientific Entrepreneurs Are Entitled to Profit From Their Discoveries", *Journal of Agricultural and Environmental Ethics* 4(1991):186-191. In a debate: Are publicly funded scientific entrepreneurs entitled to profit from their discoveries?


Minteer, Ben A., "No Experience Necessary? Foundationalism and the Retreat from Culture in Environmental Ethics," Environmental Values 7(1998): 333-348. Many of the leading contributors to the field of environmental ethics demonstrate a preference for foundationalist approaches in their theoretical justifications of environmentalism. I criticise this tendency as it figures in the work of Holmes Rolston III, J. Baird Callicott, and Eric Katz. I illustrate how these writers' desire for philosophical absolutes leads them to reject the moral resources present within human culture; a move that carries with it a number of troubling philosophical and political problems. I conclude that environmental theorists would be better served by taking a more contextual, social, and pragmatic approach to justifying their moral projects regarding nature, and that this mode of inquiry will ultimately lead toward a more philosophically sound and democratically authentic environmental ethics. KEYWORDS: environmental ethics, foundationalism, pragmatism, contextualism. Ben A. Minteer is at the University of Vermont. (EV)

Minteer, Ben A., and Robert E. Manning. "Pragmatism in Environmental Ethics: Democracy, Pluralism, and the Management of Nature." Environmental Ethics 21(1999):191-207. A growing number of contributors to environmental philosophy are beginning to rethink the field's mission and practice. Noting that the emphasis of protracted conceptual battles over axiology may not get us very far in solving environmental problems, many environmental ethicists have begun to advocate a more pragmatic, pluralistic, and policy-based approach in philosophical discussions about human-nature relationships. In this paper, we argue for the legitimacy of this approach, stressing that public deliberation and debate over alternative environmental ethics is necessary for a culture of democracy to be upheld in decision making and policy formulation. Then we argue for a democratically tempered environmental ethics that is grounded in a practical understanding of the character of moral claims regarding the natural world. We offer the results of an empirical study of environmental ethics held by the public to illustrate the diversity in their moral commitments to nature. Finally, we conclude with a discussion of the implications of this ethical pluralism for policy discussions about the management of American public lands. (EE)


"principle-ist" approach to moral argument, whereby specific natural resource and environmental policy judgments are deduced from the prior articulation of a general moral principle. More often than not, this principle is one requiring the promotion of the intrinsic value of nonhuman nature. Yet there are several problems with this method of moral reasoning, including the short-circuiting of reflective inquiry and the disregard of the complex nature of specific environmental problems and policy arguments. In the present paper, we advance an alternative, pragmatic contextualist approach to environmental ethics, one grounded in the moral theory of John Dewey. We present the results of an empirical study of public environmental ethics and natural resource management attitudes to support our position, and we conclude with a few recommendations for future inquiry in the field of environmental ethics. Keywords: contextualism, empirical study, environmental ethics, pragmatism, public attitudes. The authors are in Human Dimensions of Biology, Faculty School of Life Sciences, Arizona State University, Tempe, AZ. (JAEE)


Minteer, Ben A., "Environmental Philosophy and the Public Interest: A Pragmatic Reconciliation," Environmental Values 14(2005): 37-60. Most environmental philosophers have had little use for `conventional' philosophical and political thought. This is unfortunate, because these traditions can greatly contribute to environmental ethics and policy discussions. One mainstream concept of potential value for environmental philosophy is the notion of the public interest. Yet even though the public interest is widely acknowledged to be a powerful ethical standard in public affairs and public policy, there has been little agreement on its descriptive meaning. A particularly intriguing account of the concept in the literature, however, may be found in the work of the American pragmatist John Dewey. Dewey argued that the public interest was to be continuously constructed through the process of free, cooperative inquiry into the shared good of the democratic community. This Deweyan model of the public interest has much to offer environmental philosophers who are interested in making connections between normative arguments and environmental policy discourse, and it holds great promise for enhancing environmental philosophy's role and impact in public life. Minteer is in human dimensions of biology, Arizona State University, Tempe, AZ. (EV)

Minteer, Ben A., and Elizabeth A. Corley, A Conservation or Preservation? A Qualitative Study of the Conceptual Foundations of Natural Resource Management, Journal of Agricultural and Environmental Ethics 20(2007):307-333. Few disputes in the annals of US environmentalism enjoy the pedigree of the conservation-preservation debate. Yet, although many scholars have written extensively on the meaning and history of conservation and preservation in American environmental thought and practice, the resonance of these concepts outside the academic literature has not been sufficiently examined. Given the significance of the ideals of conservation and preservation in the justification of environmental policy and management, however, we believe that a more detailed analysis of the real-world use and understanding of these ideas is needed. In this paper, we describe the results of a qualitative, semantic study of the concepts of conservation and preservation undertaken in the context of the Chattahoochee National Forest (CNF), located in northern Georgia (USA). Thirty in-depth interviews were conducted with scientists and north Georgia residents either interested or involved in the future management of the forest. Respondents were asked to define conservation and preservation in their own words and to indicate which approach they felt was more appropriate for the management of the CNF. Qualitative content analysis was used to elicit a set of recurring themes for each foundational concept. Taken together, these themes help to flesh out the meaning of conservation and preservation for citizens and scientists today, and illustrate the evolving nature of two of the more significant and venerable ideas animating US environmental policy and management.
The authors are at Arizona State University.


Mintzer, Irving M., and Leonard, J.A., eds., Negotiating Climate Change: The Inside Story of the Rio Convention. Cambridge: Cambridge University Press, 1994. 392 pages. The fate of the Framework Convention on Climate Change in the light of political and industrial pressures to avoid doing much about real change. Science, values, and politics in a complex treaty. Nevertheless, there has been some achievement. There is a formal, binding requirement, sound reporting of emissions and target-hitting, or missing, verification by an independent authority, and there are continued negotiations. Much of this achievement was spearheaded by contributors to this volume. (v9,#2)


Miroiu, Adrian, Etica Aplicata (Applied Ethics). Bucharest, Romania: Editura Alternative, 1995. ISBN: 973-96996-6-9. Translations into Romanian of selected articles from the West on applied ethics. In addition to sections on abortion, the right to die, and euthanasia, it contains a section on nature, with translations from Peter Singer on "Animal Liberation," Tom Regan on "The Rights of Animals," and Elliot Sober's "Philosophical Problems for Environmentalism." Miroiu teaches philosophy at the University of Bucharest and is in the ministry of higher education for Romania. (v7,#2)

Miroiu, Adrian, "Global Warming and Moral Theorizing." Teoria: Revista de Teoria, Historia y Fundamentos de la Ciencia (San Sebastian, Spain) 11(no. 27, 1996):61-81. ISSN 0495-4548. In English. "The aim of my paper is to explore in some detail some epistemological issues concerning moral theorizing on global warming. First, I consider the issue of the structure of the theoretical approach in a field of inquiry requiring normative assessments. How do theoretical principles work here? What is to be regarded as a normative evidence for such a theory? Second, the criteria to determine which part, if any, of the theory gets normatively constrained, and which does not, are discussed. Third, I focus on the procedures to reach an equilibrium between such a theory and its evidence and to reach it, changes might be required on the normative side of the theory rather than on its non-normative side." Miroiu is in the faculty of philosophy, University of Bucharest, Romania. (v.9,#3)


Mishalani (Mish'alani), James K., "The Limits of Moral Community and the Limits of Moral Thought," Journal of Value Inquiry 16(1982):131-141. "We may expect moral community to be structured concentrically, so that we will find at the center those who are both authors and beneficiaries of moral consideration, and in a wider circle around them those whose well-being is in the care of the former, namely, pure beneficiaries. Such wards of a moral community may in turn be arranged in ever-expanding circles, so that the custodial responsibilities of the central community become ... increasingly attenuated as we move outward toward the periphery" (p. 132). "If moral community is conceived of as a series of ever-widening concentric circles encompassing the whole realm of living beings, then to say that we ought to minimize harm is to say that whenever we, in seeking our own interests, are forced to jeopardize the interests of other
beings, we ought, other things being equal, always to prefer the destruction of peripheral interests to central ones, and of fewer to more interests of the same degree of remoteness from the center” (p. 140). Mish'alani is at the University of Washington.


Mitcham, Carl, ed., The Encyclopedia of Science, Technology, and Ethics has just been published by Macmillan Reference. A four-volume work with over 700 articles by 300 authors from 30 countries, the Encyclopedia promotes critical interdisciplinary reflection on the role of science and technology in society (broadly construed to include engineering, medicine, computers, and more). Editor in chief Carl Mitcham has been assisted by associate editors Larry Arnhart, Deborah Johnson, and Ray Spier, along with a 25-member editorial advisory board. Articles range in length from 250 words to 5000 words.


Part I. Philosophies of the Environment and Technology
--Callicott, J. Baird, "After the Industrial Paradigm, What?", pp. 13-25. "A human economy shifting from industrial production and consumption of material objects to postindustrial production and consumption of information will be better adapted to the natural environment" (p. 25).
--Ihde, Don, "Phil-Tech Meets Eco-Phil: The Environment," pp. 27-38. The relationships between philosophy of technology and environmental philosophy, with the aim of redirecting concerns that should unite these two disciplines.
--Hickman, Larry, "Green Pragmatism: Reals Without Realism, Ideals Without Idealism," pp. 39-56. John Dewey's critique of technology sheds much light on some of the issues now debated within environmental philosophy. Dewey advanced a broad critique of technological culture, and was also an evolutionary naturalist who rejected the extremes of scientific realism on the one hand and romantic idealizations of nature on the other.
--Marietta, Don E., Jr., "Decisions Regarding Technology: The Human Factor," pp. 57-72. "We have good reasons for not using certain technologies, either because they are harmful to the natural environment for us to tolerate their use, or because they are harmful to humans, either individual humans or human groups" (p. 58).
--Casey, Timothy, "Architecture As Environmental Philosophy." "It is the built environment that establishes the cultural context within which utensils and tools are employed and nature is first uncovered." Using "architecture" in this broad sense, any kind of building by which humans open up places and situate themselves in their world, a people's architecture is "an ethos that establishes their place in the world. It is in such places that we first discover the environment and hence the `place' of nature in our lives" (p. 74).
--Robino, (Banchetti-Robino), Marina Paola, "Hermeneutic Technics: The Case of Nuclear Reactors," pp. 85-94. "The purpose of this paper ... is ... to examine phenomenologically the nature of the relation between the operator of a nuclear reactor and the instruments through which this operator gains information about the nuclear pile by focusing specifically on what went wrong" (pp. 85-86).
--Frodeman, Robert, "The Rebirth of Gaia and the Closure of Homo Technologicus," pp. 95-113. "A geological reading of the close of modernity and the advent of a postmodern era, ... by tracing the changing relationship between technology and nature. Since the industrial revolution, geology has been predominantly an economic discipline, supplying the raw materials for a technological way of life. In the future, the central role of the earth sciences will be political, helping to define the limits that individuals and communities must live within in order to flourish. ... On this reading the earth sciences become narrative sciences." (p. 95).
Embree, Lester, "Personal Environmental Phenomenology, or the Examination of Electric Vehicle Technology," pp. 115-130. The environmental case for electric vehicles, and the phenomenological justification for driving an electric vehicle.

Ferré, Frederick, "On Matter and Machines: An Environmental Speculation," pp. 131-142. "Materialism,' though avidly pursued, is yet widely subjected to scorn." Wherein lies the conflict? "The alienation between matter and spirit, matter and mind, matter and purpose, though a deep historical reality in our modern worldview, is not a theoretical necessity" (p. 113). "The matter with matter, as depicted in the dominant modern worldview and as incorporated in our culture's characteristic technologies, is that it leaves out too much that is important and true. It leaves out quality. It leaves out adventure. It leaves out society. It leaves out mind and purpose and value. But this need not be the case, and should not long continue" (p. 141).

Rolston, Holmes III, "A Managed Earth and the End of Nature?", pp. 143-164. Humans increasingly see themselves as the planetary mangers, regionally if not globally. Perhaps nature is at an end? All culturally intended activity modifies spontaneous wild nature. Nature widely bears the marks of human transforming, although there remains also much relatively undisturbed nature. Some respond that evolutionary and ecosystemic natural history has been overtaken by human engineering. Others seek a revised account by which human activity is, or should be, natural. The idea(l) of nature, absent humans, ought to be replaced with an idea(l) in which the human presence is also natural. A postmodern claim is that humans have never known, and cannot know, nature as it is itself. Wild nature is ended, because we now know that nature always wears for us a human face. But nature neither is, or ought to be, ended. Although humans belong on Earth; we do not have and do not want an entirely managed, humanized nature. Nature ought also be an end in itself.

Part II. A Symposium on Michael Zimmerman's Contesting Earth's Future.

Davion, Victoria, "Zimmerman on Feminism, Truth and Objectivity."

Maskit, Jonathan, "'All in Post': On Michael Zimmermann's Contesting Earth's Future."

Vogel, Steven, "On Michael Zimmerman's Contesting Earth's Future."

Zimmerman, Michael E., "Recognizing the Limits of Contesting Earth's Future."


Mitchell, John Hanson, *Trespassing: An Inquiry into the Private Ownership of Land*. Reading, MA: Addison-Wesley, 1998. By what right do humans own land at all? Mitchell, a frequent trespasser, is especially interested in 500 acres in eastern Massachusetts, tracing its history of owners from the native Americans to the present, with tales of their attachments to the land, the differing ways they have owned it, and how this affects the boundary between what humans hold in common and what they hold privately. Common needs weighed against the private right. (v9,#2)


Mitchell, Lawrence E., *Corporate Irresponsibility: America's Newest Export*. New Haven: Yale University Press, 2001. U.S. law has frozen the business organization at a very early stage of moral development. Law encourages corporations to maximize stockholder profit and confines the major players--stockholders, managers and board members--to morally stunted roles in pursuit of this profit. Social good all too often fails before the desire for shareholder value. What corporations really need are knowledgeable investors who will tolerate and encourage the pursuit of long-term strategies that have no short-term profit payoff (which happens more often in Europe). But board members fester in a system that encourages them to stifle these larger fiduciary duties and long-term social interests. Alas, it is tough to fix this situation by giving executives more freedom and responsibility. Stockholders cannot ensure that the board members will not "self-deal"; corporate managers cannot protect themselves from the short-term greed of stockholders. And, with global capitalism, American is exporting this flawed system around the world. Needless to say, environmental protection and conservation is near the bottom of this agenda. Mitchell is a research professor at George Washington Law School. (v.13,#2)

Mitchell, Ross E. "Thorstein Veblen: Pioneer in Environmental Sociology", *Organization and Environment* 14 (No. 4, December 2001) pp.389-408. This article investigates the writings of American institutional economist Thorstein Bunde Veblen (1857-1929) on capitalism and environment. The two main queries concern (a) Veblen's stand on natural resource utilization as a consequence of capitalism and (b) its current relevance to environmental sociology. Veblen's theories of conspicuous consumption, absentee ownership, and natural resource exploitation are examined from several of his seminal contributions. The article concludes that Veblen's pioneering analysis of wasteful use of natural resources and emulative consumerism is essential to environmental sociology and timely because of current environmental crises. Future research is suggested in two areas: (a) applying Veblen's theoretical approaches to the ecological aspects of capitalism and (b) comparing Veblen with other classical theorists such as Marx and Weber within the subfield of environmental sociology. Mitchell is a PhD candidate in the Department of Rural Economy at the University of Alberta. (v.13,#2)
Mitchell, Timothy. "The Use of an Image: America's Egypt and the Development Industry." The Ecologist 26, no.1 (1996): 19. USAID and other development agencies typically portray Egypt as the narrow valley of the River Nile hemmed in by the desert and crowded with rapidly-multiplying millions of inhabitants, a picture which enables Egypt's poverty to be ascribed to demography and geography. Such an image obscures the political and social inequalities that underlie Egypt's inability to feed itself. It also hides the role that USAID plays in the promotion of policies framed to support US domestic issues. (v7, #3)

Mitman, Gregg, The State of Nature: Ecology, Community, and American Social Thought, 1900-1950. Chicago: University of Chicago Press, 1992. 290 pages. $23.50 paper. A study of the connection between liberal social thought and the concept of harmony in nature in the first half of the century. Social attitudes and commitments shaped ecological thinking, which in turn sought to influence social and political thinking. There were steady interactions between ecology and ecologists and ideas of social community and social forces. The cooperative view of nature eroded in the 1940's and 1950's due both to the modern Darwinian synthesis of evolution by natural selection, as well as through the association of organicism with totalitarian ideologies. Mitman is in the history of science at the University of Oklahoma. (v4,#2)

Mitra, Barun, "Selling the Tiger to Save It," New York Times, August 15, 2006. Op-ed. China has a few dozen tigers, staring at extinction. Of the planet's estimated 5,000 wild tigers, about 75% are in India. China has 4,000 in captivity. The U.S. has more tigers than anybody else, 10,000 in zoos and privately owned. China has followed a strict prohibition policy, trying to prevent poaching for the use of tiger parts in traditional medicine. Now China plans to establish more tiger-breeding facilities and see the tiger parts for medicinal use, to eliminate the incentive for poaching. Never mind that these treatments are worthless; you can make lots of money selling tigers. Mitra directs the Liberty Institute, a research organization that promotes free-market economics.

Mittelstrass, J., "Umwelt und Gesundheit: Von der Schwierigkeit, sich mit Umwelt- und Gesundheitsstandards in einer Kultur-Natur zurechtzufinden [Ethics of Environment and Health: On the Difficulty of Determining Environmental and Health Standards in a Cultural Nature]," in Wiener Klinische Wochenschrift 101 (no 17, 1989): 563-571. Scientific cultures, i.e. modern industrial societies, create their own environment. The expression denoting such a creation is a Kultur-Nature (cultural nature) determined by environmental and health standards. These standards are neither natural laws nor can they be derived from nature. They are instead a part of human rationality. They also have an ethical dimension. The argument focuses on the following aspects: scientific and technological rationality as problem solver and problem producer, exploration of the concept of the Kultur-Natur, the status of environmental and health standards, presenting the case for the concept of rational ethics (Vernunftethik) against the concept of ecological ethics and the supplementation of a research imperative by an ethical imperative. Mittelstrass is at the Zentrum Philosophie und Wissenschaft Theorie, University of Constance, Germany. (v2,#2)

Mizzoni, John. "St. Francis, Paul Taylor, and Franciscan Biocentrism." Environmental Ethics 26(2004):41-56. The biocentric outlook on nature affirms our fellowship with other living creatures and portrays human beings as members of the Earth's community who have equal moral standing with other living members of the community. A comparison of Paul Taylor's biocentric theory of environmental ethics and the life and writings of St. Francis of Assisi reveals that Francis maintained a biocentric environmental ethic. This individualistic environmental ethic is grounded in biology and is unaffected by the paradigm shift in ecology in which nature is regarded as in flux rather than tending toward equilibrium. A holistic environmental ethic that accords moral standing to holistic entities (species, ecosystems, biotic communities) is more vulnerable to these changes in ecology than an environmental ethic that accords moral standing to individuals. Another strength of biocentrism is its potential to provide a unified front across religious and scientific lines. (EE)
Moberg, Gary P., "Using Risk Assessment to Define Domestic Animal Welfare", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. It is doubtful that there will ever be a universally acceptable definition of animal welfare, but I believe that it is possible to arrive at a working definition of what are acceptable practices for managing domestic animals by the use of risk assessment. Risk to an animal’s welfare occurs when an animal experiences stress of such magnitude that there is a significant diversion of the animal's biological resources from normal function. This is the biological cost of stress. If the biological cost becomes great enough, the animal enters a prepathological state where it is vulnerable to disease, where it may no longer be able to reproduce, or where it may be unable to grow. These types of biological responses can be measured and, as a result, can in turn be used as measures of well-being. These measures of well-being can then be used to establish a scale of biological cost, providing us with a basis for using risk assessment to determine what management practices place a domestic animal's well-being at risk. Risk assessment makes it possible to evaluate domestic animal welfare under various management conditions, providing definitions of welfare that can be used to set legal guidelines for the care and use of domestic animals. Moberg is with the Department of Animal Science, University of California, Davis.

Moehlman, Patricia D.; Amato, George; and Runyoro, Victor. "Genetic and Demographic Threats to the Black Rhinoceros Population in the Ngorongoro Crater." Conservation Biology 10, no.4 (1996): 1107. (v7, #3)

Moffat, Anne Simon, "Resurgent Forests Can Be Greenhouse Gas Sponges," Science 277 (18 July, 1997):325-316. Recent evidence indicates that forests store much more carbon than had been thought. Some previous studies calculated that forests take up about as much carbon dioxide while photosynthesizing as they give off when respiring, resulting in little net carbon flow into or out of forests. But new results, some from re-analysis of the old data, indicates that forests and the carbon they sequester have been undervalued, especially the carbon in forest soils, much in peat, also much more than thought in tropical forests. Reforestation can be significant in offsetting industrial carbon. (v8,#3)

Moffat, Anne Simon, "Global Nitrogen Overload Problem Becomes Critical," Science 279(1998):988-989. Synthetic nitrogen, from fertilizers, is overloading many regional ecosystems. Though fixed nitrogen is essential for life, the added nitrogen is too much of a good thing. Human activities, mostly synthetic fertilizers, but also fossil fuel burning, especially in automobiles, produce 60% of all the fixed nitrogen deposited on land each year. The situation is changing quite rapidly. (v9,#1)


Moffett, Mark W., "Tree Giants of North America," National Geographic 191(no. 1, January 1997):44-61. New discoveries in the difficult-to-reach forest canopies of the Pacific Northwest. With brief remarks about the ethics of climbing, which damages the trees and the community of life in the canopies, whether done by scientists or for increasingly popular sport tree climbing. (v8,#1)


Molddan, Bedrich, and Billharz, Suzanne, eds. Sustainability Indicators: Report of the Project on Indicators of Sustainable Development. SCOPE Series No. 58. Chichester, UK: John Wiley & Sons, 1997. 400 pp. UK , 65.00. This book is the only guide of its kind to indicators and assessment methodologies for sustainable development. Written by experts from a complementary variety of methodologies, it gives a comprehensive survey of the approaches influencing current policy and decision-making. The context is the multi-thematic program of the UN Commission of Sustainable Development (CSD), scheduled to conclude in 1997. The major divisions of the book are: Indicators and Their Use--Information for Decision-Making; The Big Picture--Comprehensive Approaches; Pieces of the Greater Picture; National Level Indicators; Research Needs. (v8,#3)


Moline, Jon N. "Aldo Leopold and the Moral Community." Environmental Ethics 8(1986):99-120. Aldo Leopold’s land ethic calls for an extension of ethical consideration to nonhuman components of the complex system he called "the land." Although the basis for this extension was holistic, interpretations of Leopold’s holism leave one baffled at how he could see his land ethic as an extension of a system which recognizes individual human rights. Leopold's critics and exponents alike have focused on the holism expressed in his definition of right and wrong. Both regard it as a working criterion of morality to be applied directly to conduct, act by act. Both are mistaken. Leopold was an indirect holist, not a direct one. That is, he applied his holistic definition of right and wrong not as a rule for judging conduct directly, case by case, but as a principle for judging conduct only indirectly by judging the rules, tastes, predilections, practices, and attitudes which influence it. Moline is in the philosophy department, University of Wisconsin, Madison, WI. (EE)

argues that Leopold is an "indirect holist" who used ecological function as the value criterion for judging principles and rules, not individual acts in the environment. This interpretation of Leopold avoids the problems of extreme holism (loss of individual value autonomy) and extreme individualism (no value for species or systems). (Katz, Bibl # 1)


Moltmann, Jürgen, God in Creation: A New Theology of Creation and the Spirit of God. San Francisco: Harper and Row, 1985. Published in the U.K. as God in Creation: An Ecological Doctrine of Creation. London: SCM Press, 1985. A Biblical theology of creation, in marked contrast to key themes in Moltmann's previous work. A trinitarian, messianic, eschatological theology of creation oriented by the concept of the Sabbath as the goal of creation. In contrast to monothestic theology, trinitarian theology supports relatedness, participation, and interpenetration, and emphasizes God's immanence in creation. An ecological theology will turn away from anthropocentrism for a cosmological theocentrism in which the Sabbath, not humanity, is the crown of creation. Humans are the crown of creation only in and as a community that is part of nature.


Moltmann, Jürgen, Wolterstorff, Nicholas, and Charry, Ellen T., A Passion for God's Reign: Theology, Christian Learning and the Christian Self. Edited by Miroslav Volf. Grand Rapids, Mi: Ermans, 1998. 112 pages. Of interest here because Moltmann, the celebrated German theologian, calls for "a new theological/ecological architecture wherein we will realize "it is not the human being that is the measure of all things, but rather God, who created all life" (p. 20). Moltmann foresees "an ecological culture" in the next century (p. 28). Only so can humankind and the Earth survive. (v.10,#1)


Monbiot, George, Manifesto For A New World Order. New York: The New York Press, 2003. In his review essay, "Which Way Forward?", David Orton calls it "an intelligently written and important book with some new ideas by a progressive journalist of the British Left, although I do not agree with the overall thesis. The thesis urged on us is to take over and democratize

Monday Morning, a periodical for Presbyterian pastors, has been running a series of short articles, "Restoring Creation: What the Churches Are Doing," that features specific local churches, for example the New Providence Presbyterian Church of Maryville, TN in the May 6, 1991 issue, and the Outdoor Ministries Unit of the Presbytery of Detroit at the Howell Conference and Nature Center, in the June 1991 issue. (v2,#2)


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. (v5,#4)


Monti, Michael J., Origin and Ordering: Aristotle, Heidegger, and the Production of Nature, 1997, State University of New York at Binghamton, Ph.D. thesis. 332 pages. Aristotle's concept of nature in the light of Martin Heidegger's critique of technological thinking and the influence his works have in environmental ethics. The "positive terminus" of Heidegger's critique of nature lies in the forgotten Greek understanding of nature as phusis, or self-emergence. Heidegger's lectures on Aristotle's Physics focus on nature's self-emergence. Aristotle conceives nature without imposing anthropocentric models of artistic production. Moving beyond Heidegger, Monti argues that Aristotle's teleological understanding of natural production reveals nature as a source of intrinsic good. But Aristotle also has important and uncomfortable limits, seen in his concept of species; and ecology attempts to expand our understanding of nature's intrinsic good. One can make provisional links between Aristotle's understanding of self-emergence and Heidegger's attempts at providing a post-technological way of relating to the natural world, which he calls "dwelling." The advisor was Stephen David Ross. (v.10,#1)


Moody, Roger. "Mining the World: The Global Reach of Rio Tinto Zinc." The Ecologist 26(Mar. 1996):46. Over the past few years, a spate of mergers and takeovers among mining multinationals has enabled them to take maximum advantage of national mining assets being privatized worldwide. British company Rio Tinto Zinc is foremost among these global giants, its position resulting in large part from its self-serving, global political infrastructure. (v7,#2)

Moon, Bruce E.. Dilemmas of International Trade. Boulder, CO: Westview Press, 1996. 192 pages. $49.95 hb, $14.95 pb. In the post-Cold War world, trade is the new arena for competition--between nations, between groups, between ethical and theoretical ideas. Political economist Bruce Moon puts contemporary trade events--NAFTA, United States-Japan controversies, the Uruguay Round of GATT, China's Most Favored Nation status, the founding of the World Trade Organization--into historical and theoretical perspective with the British Corn Laws, the Great Depression, the Bretton Woods system, and the origins of the European Union. Economic theory, terms, and concepts are explained and contextualized with those from international relations. Three central dilemmas are examined: the unequal distribution of income and wealth created by international trade, the tradeoff among competing values that trade requires, and the difficult interrelationship between economic and foreign policy goals within and among trading nations. Though internationally framed, each dilemma has ramifications at a variety of levels all the way down to the individual's role in the global economy--as a consumer, as a citizen, and ultimately as a moral agent. Bruce E. Moon is professor of International Relations at Lehigh University. (v7,#1)


Moore, David, Evans, Shelley, Nauta, Marijke M., and Rotheroe, Maurice, eds., Fungal Conservation: Issues and Solutions. Cambridge: Cambridge University Press, 2001. Threats to fungi and fungal diversity throughout the world and how fungal diversity can be conserved, for the management of nature in ways beneficial to not only humans but to the fungi. The volume results from a symposium of the British Mycological Society. Moore is at the University of Manchester, UK. (v.13, #3)

Moore, Deborah. "Think Small to Solve the World Water Crisis." The Christian Science Monitor, 12 May 1994, p. 19. Moore is a scientist with the Environmental Defense Fund's International Program, focusing on reform of the World Bank, UN agencies, and development. The World Bank tends to fund big costly projects like dams and hydro-electric projects, which often displace populations and cause long-term agricultural disasters. Alternatively, Moore argues that the World Bank should fund basic services, such as, water conservation and reuse programs, waste-water treatment, and pollution prevention. (Thanks especially to Jack Weir for monitoring the Monitor, an excellent source of serious journalism about the environment.)


Moore, Eric. "The Case for Unequal Animal Rights." I argue that the equal rights views of Tom Regan and Evelyn B. Pluhar must be rejected because they have unacceptable consequences. My objection is similar to one made in the literature by Mary Anne Warren, but I develop it in more detail and defend it from several plausible responses that an equal rights theorist might make. I formulate a theory, a moderate form of perfectionism, that makes a value distinction between moral agents and moral patients according to which although both have rights, these rights are not equal. This theory avoids the unacceptable consequences of the equal rights view and is immune to the marginal cases arguments that typical full-personhood theories succumb to. This moderate perfectionism generates an obligation for people to be vegetarians (in most cases) and to severely curtail animal experimentation. Environmental Ethics 24(2002):295-312. (EE) Brown, Donald A. Review of Privileged Goods: Commoditization and Its Impact on Environment and Society. By Jack Manno. Environmental Ethics 24(2002):313-316. (EE)


feudalism exhausted the soil and the labour power from which it derived revenues, rendering the population vulnerable to disease. The Black Death decisively altered labour-land ratios in favour of Western Europe's peasantry. This new balance of class forces eliminated the possibility of feudal restoration and led the states, landlords and merchants to favour geographical expansion as an external rather than internal spatial fix to feudal crisis. This external fix, beginning in the Atlantic world, had capitalist commodity production and exchange inscribed within it. Capitalism differed radically from feudalism in that where earlier ecological crises had been local, capitalism globalized them. From this standpoint, the origins of capitalism may shed light on today's ecological crises. Moore is a world historian and graduate student at the Department of Geography, University of California, Berkeley. (v.13, #3)


Moore, Jonathan W., "Animal Ecosystem Engineers in Streams," BioScience 56 (no.3, March 2006): 237-246 (10). An impressive array of animals function as ecosystem engineers in streams through a variety of activities, ranging from nest digging by anadromous salmon to benthic foraging by South American fishes, from the burrowing of aquatic insects to the trampling of hippos. Because ecosystem engineers can profoundly affect stream ecosystems, and because they themselves can be significantly affected by human activities, understanding ecosystem engineering in streams is increasingly important for the management of these ecosystems.

Moore, Kathleen Dean, Riverwalking. New York: Lyons and Burford Publishing, 1995. 164 pages. Building around the metaphors of rivers, symbolizing the flow of life, Moore finds that lives "come together on rivers, where biology and philosophy, body and mind, experience and idea, flow side by side until they cannot be distinguished in a landscape that is whole and beautiful and ambiguous." Reflections on her experiences over the years in and around rivers. With excellent notice in the New York Times Magazine and the Chronicle of Higher Education. Moore is in philosophy at Oregon State University. (v6,#4)


Moore, Kathleen Dean, Holdfast: At Home in the Natural World. New York: The Lyons Press, 1999. "We professors, who should be studying connection, study distinctions instead. In white laboratories, biologists find it easy to forget that they are natural philosophers. Philosophers, for their part, pluck ideas out of contexts like worms out of holes, and hold them dangling and drying in bright light. When people lock themselves in their houses at night and seal the windows shut to keep out storms, it is possible to forget, sometimes for years and years, that human beings are part of the natural world. We are only reminded, if we are reminded at all, by a sadness we can't explain and a longing for a place that feels like home. Sitting on a boulder whitewashed by western gulls, watching the sliding surf, I resolve to study holdfasts" (rootlike structures of algae for attachment to the substrate). Moore is in philosophy at Oregon State University. (v.11,#3)

Moore, Kathleen Dean. "The Truth of the Barnacles: Rachel Carson and the Moral Significance of Wonder." Environmental Ethics 27 (2005):265-277. Beginning with Rachel Carson's small book, The Sense of Wonder, I explore the moral significance of a sense of wonder: the propensity to respond with delight, awe, or yearning to what is beautiful and mysterious in the natural world when it unexpectedly reveals itself. An antidote to the view that the elements of the natural world are commodities to be disdained or destroyed, a sense of wonder leads us to celebrate and honor the more-than-human world, to care for it, to protect its thriving. If this is so, then a
sense of wonder may be a virtue, perhaps a keystone virtue in our time of reckless destruction, a source of decency and hope and restraint. (EE)


Moore, Peter D., "The Exploitation of Forests," Science and Christian Belief (Exeter: Paternoster Press) 2(1990):131-140. The disharmony between humans and the natural world is nowhere better illustrated than in the study of forest ecosystems. Since prehistoric times the removal of forest cover in temperate areas has led to retrogressive practices in vegetation and this form of destruction is now accelerating in the tropics, possibly creating global problems. The stewardship demanded of Christians in Genesis requires that Christians seek alternative ways of deriving sustenance from the forests, using sustainable harvesting. Peter Moore is an ecologist in the Division of Biosphere Sciences, King's College, London. (v2,#3)


Moore, Ronald. Natural Beauty: A Theory of Aesthetics Beyond the Arts. Peterborough, Ontario: Broadview Press, 2008. Moore presents a new philosophical account of the principles involved in making aesthetic judgments about natural objects. He weaves historical and modern accounts of natural beauty into a Asyncretic theory@ that centers on key features of aesthetic experienc e - specifically features that sustain and reward attention. In this way, Moore claims to set his account apart from both the purely cognitive and purely emotive approaches that have dominated natural aesthetics. Moore tries to show why the aesthetic appreciation of works of art and the aesthetic appreciation of nature can be mutually reinforcing and cooperative rather than rival. He also argues for how the experience of natural beauty can contribute to the larger project of living a good life.


Moretti, Laura A. "Mission Possible: Ending Four Abusive Animal Attractions," The Animals’ Agenda 17(no.3,1997):22. How to use existing momentum to rescue a chimpanzee, an orca, and several bears from abysmal lives at tourist attractions. (v8,#3)

Moretti, Laura A. "Reflections on the Normal Majority," The Animals’ Agenda 17(no.4, 1997):19. Moretti tells of being exasperated by members of the movement's confrontational, intolerant "lunatic fringe"--and why she loves them. (v8,#3)


Morgan, J. Mark, "Resources, Recreationists, and Revenues: A Policy Dilemma for Today's State Park Systems," Environmental Ethics 18(1996):279-290. Many state park systems across the U.S. are facing a controversial policy issue over the three R's: resources, recreationists, and revenues. It is becoming increasingly difficult for state parks to protect the resources and allow for public enjoyment, mainly because of political demands for increased revenue. As a result, many state park systems have built elaborate facilities for visitors. Are these park improvement projects motivated by a sincere desire to satisfy diverse user groups or simply another way of generating revenue for state governments? What are the 'hidden' costs of park development? I discuss the policy implications for state park management, along with some philosophical issues concerning the utilization of publicly owned natural resources. Morgan is in Horticulture, Forestry and Recreation Resources, Kansas State University. (EE)


Morgan, Paul A., and Scott J. Peters, "The Foundations of Planetary Agrarianism. Thomas Berry and Liberty Hyde Bailey," Journal of Agricultural and Environmental Ethics 19(2006):443-468. The challenge of pursuing sustainability in agriculture is often viewed as mainly or wholly technical in nature, requiring the reform of farming methods and the development and adoption of alternative technologies. Likewise, the purpose of sustainability is frequently cast in utilitarian terms, as a means of protecting a valuable resource (i.e., soil) and of satisfying market demands for healthy, tasty food. Paul B. Thompson has argued that the embrace of these views by many in the consumer/environmental movement enables easy co-optation by agribusiness. It also reflects a critical weakness in this movement: a lack of commitment to philosophical principles that depart from the utilitarian premises of the industrial model of agriculture. This paper draws on the writings of Thomas Berry and Liberty Hyde Bailey to identify the philosophical principles of what we call planetary agrarianism. From the perspective of planetary agrarianism, the pursuit of sustainability is a broad and challenging moral, educational, and political task. Berry helps us see that it is fundamentally a project of worldview transition, which requires a new cultural narrative that must rival, in form and appeal, the mythic power of the utilitarian industrial vision. Liberty Hyde Bailey, author of The Holy Earth (1915) and a leader in the land-grant education and nature-study movements, took up the project of worldview transition in his life work. While in some ways dated and flawed, Bailey's writings are a valuable source of guidance for developing and pursuing a viable philosophy of agriculture for the 21st century. Keywords:
agrarian philosophy - agricultural ethics - Darwinism - land-grant education - Liberty Hyde Bailey - sustainable agriculture - Thomas Berry - US agricultural history - worldview transition. Morgan is in the Department of Professional and Secondary Education, West Chester University, West Chester, PA. Peters is in the Department of Education, Cornell University, Ithaca, NY. (JAEE)


Morgenstern, Richard D. "Environmental Taxes: Is There a Double Dividend?" Environment 38, no.3 (1996): 110. Even though environmental taxes do not always offer the dual benefits of less pollution and more government revenues, they may still be the best policy choice. (v7, #3)


Moriarty, Paul Veatch and Mark Woods. "Hunting [does not equal] Predation." Environmental Ethics 19(1997):391-404. Holmes Rolston has defended certain forms of hunting and meat eating when these activities are seen as natural participation in the food chains in which we evolved. Ned Hettinger has suggested that some of Rolston's principles that govern our interactions with plants and animals might appear to be inconsistent with Rolston's defense of these activities. Hettinger attempts to show that they are not. We argue that Rolston's principles are not consistent with hunting, given Hettinger's modifications. In his defense of Rolston, Hettinger has challenged animal welfare ethicists to show that they can value animal predation while consistently condemning human hunting. We answer that hunting and meat eating by humans are "cultural" rather than "natural" activities. Moriarty teaches philosophy at Longwood College, Farmville, VA. Wood is in philosophy at the University of San Diego, CA. (EE)

Moriarty, Paul Veatch, Animal Cognition and Self-Awareness (Cognitive Ethology), 1997, University of Colorado, Boulder, Ph.D. thesis, Department of Philosophy. Most cognitive psychologists see no reason to suppose that animals are aware of their own thoughts; many philosophers view self-awareness as being fundamental to our humanity, making self-awareness a dividing line between humans and (other) animals. But there is empirical evidence that some animals are self-aware, and this has profound implications for moral duties toward animals. Self-awareness comes in degrees, and varies along three independent axes: complexity of self-concept, properties attributed to the self, and degree of awareness. Mirror-self-recognition experiments provide only a limited evidence that does not bear moral weight. Animal communication provides evidence that some animals are aware of their own mental states. One result of the study is to see how the human mind fits into the natural world. The thesis advisor was Dale Jamieson. Moriarty is now teaching philosophy at Longwood College, Farmville, Virginia. (v.10,#1)


Morito, Bruce, *Thinking Ecologically: Environmental Thought, Values and Policy*. Halifax, N.S., Canada: Fernwood Publishing, 2002. C$27.95. Foundations in metaphysics, epistemology, and axiology for developing an "ethic of attunement." A sustained argument for a shift to an ecological paradigm and how this can be carried out in a rational and systematic manner by using major historical shifts in world view as models. How dominant Western traditions have valued the environment and understood values. With a focus on axiology and the ethics of attunement, Morito builds on ideas that remain inchoate in Holmes Rolston III's work, especially his ideas about following nature. A policy section applies these concepts to sustainability and conservation. Morito is in philosophy, Athabasca University, Athabasca, Alberta, CA.

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Morito, Bruce, "Intrinsic Value: A Modern Albatross for the Ecological Approach," *Environmental Values* 12(2003): 317-336. The idea and use of the concept of intrinsic value in environmental ethics has spawned much debate in environmental ethics/axiology. Although for many, it seems fundamental and necessary for formulating an ethic for environmental protection, it seems to confuse and even undermine such efforts. `Intrinsic value' is, I argue, a concept born in the Western intellectual tradition for purposes of insulating and isolating those to whom intrinsic value can be attributed from one another and their environmental context. This is especially true from the Modern period onward. When used as a basis for determining moral considerability, these Modern foundations engender contradictory and self-defeating ways of thinking about the individual/ecosystem relationship. As a result, formulations of moral sensibilities and principles become self-defeating and, vis-a-vis the ecological context, incoherent. On the critique of this Modern residue, an alternative axiological framework is built, using Anthony Weston's idea of interdepending values as a preparation for a more ecologically coherent approach to environmental protection. This approach is dialectical and attempts to formulate an ecological foundation for moral considerability. (EV)

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Morito, Bruce. "Examining Ecosystem Integrity as a Primary Mode of Recognizing the Autonomy of Nature." *Environmental Ethics* 21(1999):59-73. Attempts to come to grip with what appears to be the autonomy of nature have developed into several schools of thought. Among the most influential of these schools is the ecosystem integrity approach to environmental ethics, management and policy. The philosophical arm of the approach has been spearheaded by Laura Westra and her work in An Environmental Proposal for Ethics. The emphasis that this school places on pristine wilderness to model ecosystem integrity and the arguments Westra devises to justify the application of what she calls the "principle of integrity," although clear in its goal and object of inquiry, could very well retrench dualistic thinking of the sort that environmental thinkers have been trying to undermine. More importantly, I argue that Westra misses an important implication for the way in which ecosystem integrity could be used to help develop an ethic not so confined by problems of justification in attaching values to facts and descriptions to prescriptions. (EE)


**ABSTRACT:** Holistic language has been employed as little more than an honorific in environmental policy formulations guided by the principle of sustainable development. In preambles of sustainable development documents, holistic language has been used to underscore the imperative of preserving ecosystem integrity and acknowledging our dependency on these systems. It has also been used to call attention to the need for a new framework of policy making, a change in direction that has been recognized as necessary for formulating environmentally sound policy. Part of this new framework involves questioning traditional concepts of the human agent and value assumptions. Yet holistic principles play virtually no substantive role in the formulation of policy. The outcome of this omission is that
holism has been co-opted, rather than incorporated into sustainable development initiatives. A practical consequence of this move is that some subscribers to sustainable development principles have their values and perspectives co-opted, rather than incorporated, since the analytical system through which problems are identified and solutions developed is determined by a dominant sector of society, not by a holistic understanding of society. Aboriginal peoples have been among those whose values and perspectives have been co-opted. In 1990, I argued this discrepancy allowed holistic language to be used as a motivating device for soliciting subscribers, but had nothing to do with actual policy. Today, the problem has deepened as sustainable development has become more ubiquitous and influential. I will try to show how sustainable development deeply entrenches a tolerance for contradiction, which in turn engenders a co-opting of Aboriginal perspectives and values by those subscribing to the dominant economic (E&E)

Morito, Bruce. "Value, Metaphysics, and Anthropocentrism," Environmental Values 4(1995):31-47. The lack of metaphysical grounding of environmental values, and impatience towards the enterprise of seeking such grounding, result in a superficial and wrongheaded view of anthropocentrism. Anthropocentrism is best understood as a limiting condition, a point from which we can begin to reformulate an understanding of ourselves, our values, and our relation to the environment. It is not principally a starting point for the existence of values, as is assumed under traditional theories of anthropocentrism. To demonstrate and elaborate on this position, the paper focuses on environmental values and how we traditionally assume them to be formed and legitimated. A critique of the analyses of two prominent figures in the field of environmental ethics, Bryan Norton and Eugene Hargrove, serves as the backdrop against which an alternative view is formed. This alternative is metaphysically grounded in an ecologically informed analysis of valuational activity. Against the tradition, the argument establishes two main points: 1) that attempts to ground environmental values on human preferences, agreements, traditions, or culturally driven commitments are liable to legitimate contrary values; and 2) that an ecologically driven analysis of values shows that valuations of the environment are not fundamentally conferred onto it by human beings. Positively, the paper attempts to show that our inclusion as members of the ecological community makes our valuations an integral and transformational element within more comprehensive ecological processes. As such, our moral commitment to the environment must be radically reshaped in order adequately to incorporate this renewed understanding. KEYWORDS: Ecology, legitimation, moral failure, preference, preservation, triangular value relation, value conferring. Morito is in the philosophy department, University of Guelph. (EV)

Moritz, Craig, Jiro Kikkawa, and David Dooley, eds., Conservation Biology in Australia and Oceania. 500 pages, hardbound, $ 74.95. 1993. In Australia: Surrey Beatty and Sons. In the U.S. distributed by: University of Minnesota Press. (v4,#2)


Morowitz, Harold J., "Balancing Species Preservation and Economic Considerations," Science, August 16, 1991. "Once the term `value' is introduced, the question moves to economics and ethics, both of which use that construct, but in very different senses. From a narrow economic point of view, we need a monetary metric of a species value to balance benefits against costs of preservation. View from environmental ethics no such direct measure is possible." (v2,#3)

Morrill, R., "Inequalities of Power, Costs and Benefits across Geographic Scales: The Hanford (Washington) Reservation," Political Geography 18(1999):1-23. How federal mandates dominate a land-use decision; Morrill thinks that regional and federal governments and metropolitan intellectual and political elites push their agenda over the needs and desires of rural, small-town
residents and their local governments. One such imposed agenda is making Hanford (long a nuclear site) into a wildlife reservation. But commentators think otherwise, especially:

-Martin, Deborah G., "Transcending the Fixity of Jurisdictional Scale," Political Geography 18(1999):33-38. Governments are fixed by scale but the other actors have interests fluid across many scales. Environmentalists with interests at stake in Hanford as a wildlife reservation are both local and regional, federal and state. Analysis of land-use conflicts must examine the power struggles and cross-scale alliances of multiple interests and social identities.


Morris, Carol, and Wragg, Amanda, "Talking about the Birds and the Bees: Biodiversity Claims Making at the Local Level," Environmental Values 12(2003): 71-90. This paper adopts a social constructionist perspective to examine how the biodiversity 'claim' is constructed and contested at local level. A framework is deployed which is based on Hannigan's (1995) ideas that certain factors need to be present for an environmental claim to be legitimised within the international arena (i.e. scientific authority; popularisers; media coverage; symbolic and visual dramatisation; economic incentives and institutional sponsorship). Empirical research into the production and implementation of Oxfordshire's Biodiversity Action Plan and Farm Biodiversity Action Plans in England and Scotland is used as a vehicle to explore the legitimisation of the biodiversity claim at the local scale. The two strands of research highlight the current importance of biodiversity as a focus for environmental planning partnerships (although the extent of public 'buy-in' to the claim is unclear) and the way in which biodiversity as a 'buzzword' has been adopted by farmers with some reluctance and mainly for financial reasons. There is strong evidence that the scientific basis of the claim is crucial in terms of engendering support, and that the rhetoric employed at the local level is positive rather than a 'rhetoric of loss'. However, the need for further popularisation of the biodiversity issue is identified. Potential future lines of research enquiry are also outlined. (EV)


Morris, M. C., and Weaver, S. A., "Minimizing harm in agricultural animal experiments in New Zealand," Journal of Agricultural and Environmental Ethics 16(2003):421-437. Intrusive agricultural experiments published in New Zealand in the last five years are reviewed in terms of the degree of animal suffering involved, and the necessity for this suffering in relation to research findings. When measured against animal welfare criteria of the Ministry of Agriculture, thirty-six studies inflicted "severe" or "very severe" suffering. Many of these experiments had questionable short-term applications, had an application restricted to agricultural production or economic growth, or could have been modified to prevent or reduce suffering. KEY WORDS: animal ethics committees, animal welfare, New Zealand. (JAEE)

Morris, Michael C., and Weaver, Sean A., "Minimizing harm in possum control operations and experiments in New Zealand," Journal of Agricultural and Environmental Ethics 16(2003):367-
Pest control operations and experimentation on sentient animals such as the brushtail possum can cause unnecessary and avoidable suffering in the animal subjects. Minimizing animal suffering is an animal welfare goal and can be used as a guide in the design and execution of animal experimentation and pest control operations. The public has little sympathy for the possum, which can cause widespread environmental damage, but does believe that control should be as painless as possible. KEY WORDS: bovine tuberculosis, immunocontraception, New Zealand, pest control, possum, Trichosurus vulpecula. (JAEE)

Morris, Michael C., "Issues associated with research on sheep parasite control in New Zealand - A descriptive ethic," Journal of Agricultural and Environmental Ethics 16(2003):187-207. New Zealanders generally oppose the use of animal experimentation where there is no demonstrable and immediate benefit for human, animal, or environmental health. Intrusive experiments on sheep internal and external parasites published between 1996 and 2000 are reviewed, and discussed in relation to these public sensibilities. All the experiments reviewed would be unacceptable according to the orthodox morality of the general public. Breeding programs, rotation of grazing, "low-tech" vaccination, and in vitro models of sheep can provide insights into preventing parasite infestation without intrusive experiments. Possible changes in New Zealand animal welfare legislation and its interpretation by Animal Ethics Committees are discussed. KEY WORDS: Animal Ethics Committees, flystrike, nematodes, parasites, sheep. (JAEE)

Morris, Michael C., "The ethics and politics of the caged layer hen debate in New Zealand," Journal of Agricultural and Environmental Ethics 19(2006):495-514. Changes in attitudes toward animal welfare, with a greater emphasis on the importance of allowing animals to express normal patterns of behavior has led to an examination of the practice of keeping hens in battery cages. There is widespread scientific consensus that the conditions of confinement and the barren nature of battery cages severely restrict hens? behavioral repertoire, and are thus detrimental to their welfare. The New Zealand Animal Welfare Act 1999, stipulates that animals must have "the opportunity to display normal patterns of behaviour." In spite of this provision, the New Zealand government has not acted in phasing out battery cages, arguing instead that there is insufficient evidence that welfare will be improved by a phase-out. There is evidence of strong industry pressure on the government, and the use of tactics common in policy considerations where changes are resisted by powerful interests. It is important that policy processes are better managed so that welfare changes are based on both public preferences and scientific knowledge, and ways of doing this are discussed. Keywords: animal welfare - layer hens - New Zealand. Morris lives in Karori, Wellington, New Zealand. (JAEE)

Morris, Simon Conway, "Evolution: Bringing Molecules into the Fold," Cell 100(2000):1-11. Earth has evolved startling diversity of life, but this biodiversity is, in molecular terms, little more than skin deep. Most, perhaps all, of the basic building blocks necessary for organismal complexity were available long before the emergence of multicellularity. How and when the gene networks and regulatory mechanisms that led to complex organs and functioning organisms were assembled is largely obscure. Co-option of previous genes and products to novel and more complex functions is common, but unpredictable. Just as the phenotypic diversity of life excites the inspiration of a naturalist, so the range of molecules and the sophistication of their biochemistries impress the molecular biologist. We little understand the underlying constraints on form and whether and how far convergences are inevitable.

Biologists shy away from such studies for two reasons. (1) If evolution is in some sense channeled, then this reopens the controversial prospect of a teleology. The constrained and inevitable process is underpinned by a purpose, a sort of biological Anthropic Principle, which broadly sets boundary conditions for evolutionary history. (2) The study of evolution is strongly historical, and the prospect of a seemingly unique trajectory of circumstances for the history of life may be discouraging to those who are seeking general principles. Here convergences may
be more common and more determinative than suspected; different genetic origins produce a similar complex result. The central conundrum of evolution is: how do we balance the process of change against the emergence of form. Conway Morris is a well-known paleontologist at Cambridge University, and this is an invited "millennium review" of the field. (v.13,#4)

Morris, Mary Hallock. The Political Strategies of Winning and Losing Coalitions: Agricultural and Environmental Groups in the Debate over Hypoxia. @ Politics & Policy, Vol. 35, no. 4 (2007): 836-71. This article presents a new typology that can be used to assess the political strategies used by winners and losers, ranging from mobilization to venue shifts and issue framing, of the debate over the dead zone of the Gulf of Mexico.


Morrison, Keith, "Wilderness as the Kingdom of God," Ecotheology Vol 6 (Jul 01/Jan 02):23-41. morrison@lincoln.ac.nz The Eastern Orthodox Christian tradition has a spirituality the gives rise to ecotheological reflections. The reflections are couched in existential terminology describing mystical experience as well as historical and ecological praxis. The reflections have a realist theology of the Body of Christ considered to comprise the heavenly or uncreated, and the earthly or created. The ecotheology developed in this paper interprets a realist theology of the Body of Christ through phenomenology and systems theory in an attempt to face the contemporary concrete issues of institutionalized materialism and severe environmental and social crises. Cross-cultural insights with Mahayana Buddhist traditions are commented upon in exploration of the challenges and opportunities of interculturalism and religious pluralism. The central thread in the paper is the contemporary symbol wilderness, exploring how it is very effective in providing an image of community that to some speaks louder than kingdom. Further, the inherent relationships between the derivatives 'wild', 'wildness' and 'wilderness' are shown to reflect the paradoxical dynamics of the realist ecotheology developed. Paradoxical links are teased out between the material and spiritual, and also between the individual body and the cosmic body.

Morrison, Micah, Fire in Paradise: The Yellowstone Fires and the Politics of Environmentalism. New York: HarperCollins, 1993. The ecosystem paradigm has become a quasi-mystical idea, shifting out of the realm of rigorous scientific inquiry and into our culture without serious challenge, promoted by environmentalists as a religion. In 1988, Yellowstone paid the price for ecosystem management as fires played out their "naturally regulating" role in the ecosystem. The blazes eventually covered 1.2 million acres, cost the taxpayer $120 million, and led to three deaths. We must begin redefining the ecosystem paradigm, arguing for mankind's [sic] proper role as a wise steward of the land, not as an enemy of its "natural functions." And part of wise stewardship means sometimes protecting the forest from its natural enemy, fire. Wise use also means ruling in favor of jobs over spotted owls in the Pacific Northwest, and in favor of middle-class development over gnatcatching birds in Southern California. Morrison finds Alston Chase a role model. Morrison is senior editor of Insight magazine. (v4,#2)

Morrison, Reg, *The Spirit in the Genes: Humanity's Proud Illusion and the Laws of Nature*. Ithaca, NY: Cornell University Press, 1999. Humans are the worst "plague mammal" (p. 96-98). Our illusory belief in human superiority and invincibility leads us to overpopulate the Earth, resulting in wanton habitat destruction throughout the glorious nonhuman world. Human growth, pursuing humans' self-interest, often escalated and justified by religious motivations, causes repeated environmental disasters. Humans are unable to be concerned with their long term self-interest. Our painful ascent to civilization has been a plague on the Earth. "We conveniently contend that we alone of all earth's species are not normal animals, an extraordinary claim that demands extraordinary proof. And none exists. Not the slightest scrap of hard evidence, either morphological or genetic, exists to suggest that Homo sapiens is not, like all other animals, a natural product of evolution. ... The only irrefutable argument in favor of humanity's specialness is in fact purely mystical--and entirely circular. The myth lives on" (pp. xiii-xiv). (One might wonder whether such an animal, alone among all other species, operating with a view of its superiority that comes to jeopardize the planet, isn't some scrap of evidence of being special.)


Morrison, Roy, *Ecological Democracy*. Boston: South End Press, 1995. 250 pages. $ 15, paper. A broadly based critique of industrialism, exploring currently emerging ecological democracies, such as the Mondragon Cooperative system in Spain, the Seikatsu Cooperative Clubs in Japan and Coop Atlantic in Canada. A dramatically revitalized participatory democracy, which includes community control of finances, a social wage, cooperative economies, demilitarization and a solar transition. Morrison is a longtime peace and anti-nuclear activist, living in Warner, New Hampshire. (v6,#4)

Mortensen, Viggo, ed., *Concern for Creation: Voices on the Theology of Creation*. Special issue of Tro & Tanke: Svenska Kyrkans Forskningsrad, 1995, no. 5. Fifteen articles, all in English, from authors in various nations, under the sponsorship of the Lutheran World Federation. Samples: Per Lonning (Norway), "Creation--How It Became an Ecumenical Challenge"; Bernard Przewpzny (Italy), "The Catholic Church and Ecological Concern"; Grace N. Ndyabahika (Uganda), "The Earth Belongs to God: Women's Place in Creation." Tro & Tanke, Svenska kyrkan, 751 70 Uppsala. Phone: 018/16 96 67 Mortensen is with the Lutheran World Federation, Geneva, Switzerland. (v7,#2)


Morton, Oliver, "Is the Earth Alive?" Discover, October 1999, pp. 96-101. Profile of James Lovelock, and an update on the Gaia hypothesis. Lovelock, speaking at a recent Oxford conference: "Gaia is a theory of science and is therefore always provisional and evolving. It is never dogmatic or certain and could even be wrong. Provisional it may be but, being of the palpable Earth, it is something tangible to love and fear and think we understand. We can put our trust, even faith, in Gaia, and this is different from the cold certainty of purposeless atheism or an unwavering belief in God\'s purpose. ... I have put before you the proposition that Gaia, in addition to being a theory in science, offers a world view for agnostics. This would require an interactive trust in Gaia, not blind faith. A trust that accepts that, like us, Gaia has a finite life span and is provisional" (p. 102). (v.11,#1)

Morton, Adam, "A Note on Comparing Death and Pain", Bioethics, 2 (1988): 129-35. The purpose of this note is to describe a way in which pain and death can be used to explore the evils befalling individuals of different species. It follows that the death of an animal of one species can be compared to that of another, in terms of their different relations to comparable amounts of pain. Thus, pain is used as the common currency in comparing rather different evils in different species.


The European Union, in a mandate known as the End-of-Life Vehicles Directive, will require 85% of a car\'s materials, by weight, to be recovered and reused. In 2007, networks set up by carmakers in the European Union must be ready to accept all scrap vehicles, regardless of age, at no cost to the car\'s last owner. In 2015, the portion of each vehicle that should be recycled increases to 95%. The 2007 Mercedes-Benz S-Class sedan, shown recently at a Frankfurt auto show, already complies with the 2015 regulation. Honda Motors Europe is planning how to take back, over the next few years, over half a million vehicles. The U.S. has such recycling nowhere on its agenda, relying largely on voluntary compliance, market-based approaches, disliking "command and control" solutions, also claiming to have amply landfill space, unlike Europe.

Moulden, Julia and Patrick Carson, Green Is Gold (Harper Business Publications, 1991). $ 19.95. Billed as the first practical guide for companies going green. How to develop a green corporate strategy. Carson is the vice-president for environmental affairs for Loblaws (a food supermarket), the company that launched G.R.E.E.N., said to be one of the most successful environmentally friendly product lines in North America. The authors claim that jumping on the green bandwagon is "the biggest opportunity for business for the coming decade and the next century." (v2,#3)


Mountain, Alan, *Paradise under Pressure (St. Lucia, Kosi Bay, Sodwana, Lake Sibaya, Maputoland)*. Johannesburg: Southern Book Publishing, 1990. ISBN 1 86812 277 8. 133 pages. The St. Lucia area includes a nature reserve, including a wilderness area (the Greater St. Lucia Wetland Park), on the shoreline of northern Natal and the Indian Ocean, threatened to be mined for the rutile in the sand dunes, now forested with a rather dense coastal forest. Mining has been in progress some years in a coastal area to the south. In a celebrated conservation victory, a 1994 government board decided not to proceed with the mining, not at least at present.


Moyers, Bill, "A Question for Journalists: How Do We Cover Penguins and the Politics of Denial?" Keynote address to annual convention of the Society of Environmental Journalists, Austin, Texas, October 1, 2005. A startling indictment of how corporations (often enlisting with the religious right) have plotted behind the scenes to eviscerate environmental regulations. This includes Moyers' own experiences with his documentaries on PBS. In one called "Trade Secrets," he showed that for over 40 years big chemical companies have deliberately withheld from workers and consumers damaging information about toxic chemicals, and found himself the target of a classic smear campaign and pressure for PBS to pull the documentary. But it ran and a year later received an Emmy for outstanding investigative reporting. Moyers' keynote address has been circulating widely on the web. Online at: http://www.sej.org/confer/past_conferences.htm

Moyle, Peter B. and Moyle, Petrea R., "Endangered Fishes and Economics: Intergenerational Obligations," *Environmental Biology of Fishes* 43(no. 1, 1995):29-37. The diversity of fishes is declining worldwide, and may be lost to future generations. "The best arguments for protection of biodiversity, from our perspective, are the ethical and moral arguments ... e.g. Norton, 1987, Rolston 1994). Ultimately, if these arguments do not prevail, much of the world's biodiversity is likely to be lost. In the short run, however, the most effective arguments are probably economic arguments, ranging from those that point out the limits of the Earth's ability to sustain humanity to those that deal with local issues such as the value of protecting fisheries in a particular stream." (1) The humility principle: humans must accept that technological advances will not compensate for poor technological management. (2) The precautionary principle. (3) The reversibility principle. Irreversible changes to the environment should not be made. (4) The safe minimum standard. Err on the safe side. Peter Moyle is in the Department of Wildlife, Fish, and
Muchett, F.D. ed. Principles of Sustainable Development. 1996. 200pp. $49.95 cloth. Written for professionals involved in industries faced with environmental issues, this book brings together the collective thinking and experience of several individuals from different disciples. It includes a history and overview. (v8,#1)

This paper attempts to assess and evaluate some of the economic implications of the Convention on Biological Diversity. After outlining the main principles and the scope of this Convention, the following issues are addressed: the determination of the 'optimal' level of biodiversity loss, the meaning of incremental costs, and monetary evaluation problems of ecological resources and the problems it poses for the funding mechanism (GEF). The paper concludes with a discussion of the issues of commercialisation and access to genetic resources.
Keywords: Ecological economics, biological diversity, monetary evaluation, commercialisation.
Mueller is in the Department of Economics Concordia University, Montreal, Quebec, Canada H3G 1MB. (EV)


Munck, Nicholas J., and Josep Call, "Apes Save Tools for Future Use," Science 312(19 May 2006):1038-1040. New research suggests that great apes can anticipate future needs. Particularly, they save tools for future use, over a timespan of up to fourteen hours. But how much does this differ from many animals that do things for the future, such as birds that build nests or beavers that build dams? It is difficult to separate associative learning from clear foresight, but these authors believe they have evidence for precursors skills for planning for the future. The authors are at the Max Planck Institute for Evolutionary Anthropology.

Muller, Frank, "Mitigating Climate Change: The Case for Energy Taxes", Environment, 38(No.2, 1996):12-. Carbon and energy taxes are one powerful tool in the struggle to curb carbon dioxide emissions, but climate change policymakers need to reassess how to respond to their critics. (v7,#1)


Mulligan, Shane P., "For Whose Benefit? Limits to Sharing in the Bioprospecting `Regime'," Environmental Politics 8 (No. 4, 1999 Wint): 35-. (v.11,#4)


Mulvaney, Tony, An Explanation, and Analysis, of Heidegger's Concepts of 'Being' and 'Clearing' and Their Application to Environmental Philosophy, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)

Mulvaney, Tony, An Explanation, and Analysis, of Heidegger's Concepts of 'Being' and 'Clearing' and Their Application to Environmental Philosophy, Master's Thesis, Department of Philosophy, Lancaster University, September 1992.


Munda, Giuseppe, "Environmental Economics, Ecological Economics, and the Concept of Sustainable Development," Environmental Values 6(1997):213-233. ABSTRACT: This paper presents a systematic discussion, mainly for non-economists, on economic approaches to the concept of sustainable development. As a first step, the concept of sustainability is extensively discussed. As a second step, the argument that it is not possible to consider sustainability only from an economic or ecological point of view is defended. Issues such as economic-ecological integration, inter-generational and intra-generational equity are considered of fundamental
importance. Two different economic approaches to environmental issues, i.e. neo-classical environmental economics and ecological economics, are compared. Some key differences such as weak versus strong sustainability, commensurability versus incommensurability and ethical neutrality versus different values acceptance are pointed out. Universitat Autonoma de Barcelona, Dept of Economics and Economic History, 08193 Bellaterra, (Barcelona), Spain, Email: iehe7@cc.uab.es


Munnichs, Geert, "Whom to Trust? Public Concerns, Late Modern Risks, and Expert Trustworthiness," Journal of Agricultural and Environmental Ethics 17(2004):113-130. This article discusses the conditions under which the use of expert knowledge may provide an adequate response to public concerns about high-tech, late modern risks. Scientific risk estimation has more than once led to expert controversies. When these controversies occur, the public at large--as a media audience--faces a paradoxical situation: on the one hand it must rely on the expertise of scientists as represented in the mass media, but on the other it is confused by competing expert claims in the absence of any clear-cut standard to judge these claims. The question then arises, what expertise can the public trust? I argue that expert controversies cannot be settled by appealing to neutral, impartial expertise, because each use of expert knowledge in applied contexts is inextricably bound up with normative and evaluative assumptions. This value-laden nature of expert contributions, however, does not necessarily force us to adopt a relativist conception of expert knowledge. Nor does it imply active involvement of ordinary citizens in scientific risk estimation--as some authors seem to suggest. The value-laden, or partisan, nature of expert statements rather requires an unbiased process of expert dispute in which experts and counter-experts can participate. Moreover, instead of being a reason for discrediting expert contributions, experts' commitment may enhance public trustworthiness because it enlarges the scope of perspectives taken into account, to include public concerns. Experts who share the same worries as (some of) the public could be expected to voice these worries at the level of expert dispute. Thus, a broadly shaped expert dispute, that is accessible to both proponents and opponents, is a prerequisite for public trust. Keywords: expert controversies, late modern risks, public trust. Munnichs is from Wageningen, The Netherlands. (JAEE)

Munson-Boyers, Laurel, "Wilderness Progress in Namibia," International Journal of Wilderness 2 (no. 3, December, 1996):42. Wilderness in a developing country, one with 35 to 40% unemployment, 30 to 40% illiteracy, and also with spectacular and silent expanses of wildlands. A symposium was held there with 100 participants on wilderness designation in Africa. (v8,#1)

Munthali, SM; Mkanda, FX, "The plight of Malawi's wildlife: Is trans-location of animals the solution?," Biodiversity and Conservation 11(no.5, 2002):751-768. (v.13, #3)


Muradian, R; MartinezAlier, J; Correa, H, "International Capital Versus Local Population: The Environmental Conflict of the Tambogrande Mining Project, Peru," Society and Natural Resources 16(no.9, 2003):775-792. (v.14, #4)


Murphy, Andrew R. "Environmentalism, Antimodernism, and the Recurrent Rhetoric of Decline." Environmental Ethics 25(2003):79-98. I explore the main features and historical pedigree of antimodern environmental declinism, a prominent family of contemporary critiques that ascribes responsibility for environmental ills to the legacy of the Scientific revolution or "modernity" more generally. I argue that each of its three central oppositions (to the human/nature dichotomy, the dominance of scientific method, and industrialism and technology) are part of a long-standing rhetorical tradition, and are neither unique nor unprecedented. I stress the communicative, narrative, persuasive, and political nature of the environmental project, rather than its claims to have arrived at an objective description of unprecedented ecological damage in late modernity. This view is perhaps less convincing to an audience looking for certainty in an age of science, but it is more faithful to the attenuated, mediated ways in which we experience and make sense of the world around us. (EE)

Murphy, Charles M. At Home on Earth: Foundations for a Catholic Ethic of the Environment (New York: Crossroad, 1989). (v1,#1)

Murphy, Dean E., "Study Finds Climate Shift Threatens California," New York Times, August 17, 2004, A 19. Temperatures rising could lead to a seven-fold increase in heat-related deaths in Los Angeles and imperil the state's wine and dairy industries. (v. 15, # 3)


Murphy-Lawless, Jo, "The Impact of BSE and FMD on Ethics and Democratic Process," Journal of Agricultural and Environmental Ethics 17(2004):385-403. The recent crises of BSE and FMD in the United Kingdom have revealed widespread concerns on the part of farmers and consumers about government regulations and handling of animal movements, animal welfare, and food safety. Both crises raised issues of government accountability and the lack of openness in public debate. The issues of democratic process and decision-making were especially strong in relation to the mass slaughter policy of the government to control FMD. This article explores public disquiet about these matters, as expressed through the reports of two public inquiries, and the perceived links between government decision-making and the needs of global agribusiness, to the detriment of family farms and animal welfare. In light of the growing evidence about the environmental and economic costs of agribusiness, the argument is made that strong programs of citizen action, such as the Devon Foot and Mouth Inquiry, that are grounded in an ethical stance on animal welfare can challenge the perspectives of central governments about concepts of cost, efficiency, and safety in agriculture. Keywords: citizen action, democratic process, epidemic animal illnesses, global agribusiness. The author is on the School of Nursing and Midwifery Studies, Trinity College, Dublin, Ireland. (JAEE)


Murphy, Liam, and Nagel, Thomas, The Myth of Ownership: Taxes and Justice. Oxford: Oxford University Press, 2002. Taxes can be evaluated only in the context of the overall system of
property rights that they help to create; we need to reconsider how our tax policy shapes our system of property rights. The authors are at New York University.

Murphy, Patrick D. "Sex-Typing the Planet: Gaia Imagery and the Problem of Subverting Patriarchy." *Environmental Ethics* 10(1988):155-168. The ecology movement has recently attempted to reinvigorate the image of Earth in terms of Lovelock’s and Epton’s "Gaia hypothesis." I analyze the shortcomings of using Gaia imagery in the works of Lovelock, deep ecologists, feminists, and ecological poets, and conclude that while the hypothesis serves to alter consciousness, naming it Gaia reinforces the oppressive hierarchical patterns of patriarchal gender stereotypes that it opposes. We are moving toward a new paradigm of nonpatriarchal pluralistic co-evolution, but if deep ecology is going to promote fully its development, it needs to recast or cast aside Gaia imagery. Murphy is at the English department, University of Pennsylvania, Indiana, PA. (EE)

A discussion of the dangers of using the mythic idea of Gaia--the Earth Goddess--as a guiding metaphor of deep ecology and a new environmental consciousness. The idea of a feminine Gaia reinforces oppressive hierarchical and patriarchal thinking and prevents the development of a new pluralistic non-gender paradigm of the human relation to nature. (Katz, Bibl # 2)


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. (v5,#4)

Murphy, Patrick D., ed., *Literature of Nature: An International Sourcebook*. Chicago: Fitzroy Dearborn Publishers, 1998. ISBN 1-57958-010-6. Essays, selections, analysis from U.S. and Canada, England, Ireland, Wales, Scotland, France, Germany, Malta, Romania, Russia, Australia, New Zealand, Japan, Korea, China, Taiwan, Africa, the Arab world, Brazil, the Caribbean, Latin America, the Arctic, Antarctica. (v.10,#2)

Murphy, Patrick D., *Understanding Gary Snyder*. Columbia, SC: University of South Carolina Press, 1992. Cloth. 186 pages. Murphy examines Snyder's poetry and prose, including the Pulitzer Prize-winning *Turtle Island*. An introduction summarizes Snyder's career and provides an overview of the three factors Murphy finds crucial to understanding Snyder's works: Buddhism, ecology, and "field-composition" poetics of contemporary free verse. Previous critics have not recognized the extent to which these interpenetrate. With an extensive bibliography on Snyder. Murphy is in the English Department at Indiana University of Pennsylvania, and specializes in environmental writing and writers. (v3,#3)

Murphy, Patrick D., "Rethinking the Relations of Nature, Culture, and Agency." *Environmental Values* Vol.1 No.4(1992):311-320. ABSTRACT: Beginning with a critique of the Enlightenment human/nature dualism, this essay argues for a new conception of human agency based on culturopoiea and an application of an ecofeminist dialogic method for analyzing human-nature relationships, with the idea of volitional interdependence replacing ideas of free will and determinism. Further, it posits that we need to replace the alienational model of otherness based on a psychoanalytic model with a relational model of anoterness based on an ecological model, and concludes by encouraging attention to developing bioregional natured cultures in place of
nation states and multinational corporations. KEYWORDS: Bioregionalism, culturopoeia, dialogics, ecology, human agency. English Department, Indiana University of Pennsylvania, 110 Leonard Hall, Indiana, Pennsylvania 15705-1094, USA.

Murphy, Raymond, Rationality and Nature: A Sociological Inquiry. Boulder, CO: Westview Press, 1994. 295 pages. In contemporary society, the belief that reason, a distinctive characteristic of humans, enables them to reshape and master nature is contested by an alternative belief that nature is not so plastic, hence humans must adapt to nature and render development sustainable, or even limit growth. Social ecology claims that environmental problems result from institutional hierarchies and suggests decentralized institutions and egalitarian ethics. Deep ecologists stress the intrinsic value of nature and feminists postulate that women are inherently closer to nature than men. Murphy assesses these theories and goes on to propose a theory of environmental debt as a source of capital accumulation. He develops a model of "environmental classes" to understand the political and economic bases of conflict over the environment. Murphy teaches sociology at the University of Ottawa. (v7,#2)


Murphfree, Marshall W. "Articulating Voices from the Commons, Interpretation, Translation, and Facilitation: Roles and Modes for Common Property Scholarship." Society & Natural Resources 10(no.4, 1997):415. (v8,#3)

Murr, Andrew, "A River Runs Through It," Newsweek, July 12, 1999, p. 46. Dams are sometimes coming down, several dozens of the 75,000 dams built on U.S. rivers. Example: Maine's Edwards Dam on the Kennebec River, which produced .1 percent of Maine's power, but blocked salmon, striped bass, shad, and six other species from reaching spawning grounds. (v.11,#1)


Murray, Robert, "The Cosmic Covenant," The Ecologist 30 (No. 1, Jan 01 2000): 25-. Robert Murray reveals the ecological or cosmic origins of the Judeo-Christian tradition. (v.11,#2)


Murray, Scott Fitzgerald, Civic Virtue and Public Policy: Discerning the Particulars of Reforming the General Mining Law of 1872, 1997, University of Nevada, Las Vegas, M. A. thesis. 220 pages. Analysis of the General Mining Law of 1872 advocating reforms to this public lands law anachronism. Drawing from Aristotle and David Hume, individuals of good character, acting as citizens in pursuit of the public good through historically informed self-government deliberate best about public policy. Through the exercise of civic virtue, incremental and acceptable solutions are most likely to be found. In this way strong ethical arguments can be made for reforming the General Mining Law. (v.10,#1)

Murray, Ian. AEco-Censorship: The Effort to Thwart the Climate Change Debate.@ The New Atlantis No. 14 (Fall 2006): 134-37. Global warming is a serious enough subject that it needs to be debated fully, subjecting every hypothesis to rigorous testing and hard-headed analysis. When alarmists, many of them respected scientists, say the debate is over and global warming an established fact demanding urgent response, responsible scientists and policymakers need to insist that the debate is still in progress. Murray is a senior fellow at the Competitive Enterprise Institute.


Muttit, Greg. "Degrees of Involvement." The Ecologist 29(No. 5, August 1999):326- . UK universities, rather than using their expertise to find solutions to climate change, are instead acting to prop up the oil industry. (v10,#4)

Muttit, E; Marriott, J, "Cynics or saviours? the facts behind oil companies' claims of research into alternative and renewable energies," Ecologist 31(no. 6, 2001):50-51. (v.13,#1)


Myers, Nancy, "The Precautionary Principle Puts Values First," Bulletin of Science, Technology and Society 22(no. 3, June 2002):210-219. The precautionary principle is an emerging principle of international law but has only recently been proposed in North America as a new basis for environmental policy. On the surface it is a simple, common-sense proposition: in the face of possible harm, exercise precaution. But the enthusiasm the principle has stirred among public advocates suggests it has a deeper appeal. It is, in fact, based on values related to "forecaring for life" and the natural world. The principle cannot effectively be invoked without stating these values up front. The principle makes it clear that decisions and developments in science and technology are based first of all on values and only secondarily on scientific and technological fact and process. Moreover, a precautionary approach is best carried out in the context of goals that embody the values of communities and societies. Myers is with the Science and Environmental Health Network. She a former managing editor and executive director of the Bulletin of the Atomic Scientists. (v. 15, # 3)

Myers, Norman, "The World's Forests: Need for a Policy Appraisal," Science 268 (May 12, 1995): 823-24. The World Commission on Forests and Sustainable Development is soon to be established and gives promise of a better appraisal of how forests can confer their manifold benefits on society. Forests once covered more than 40% of Earth's land surface, but their expanse has been reduced by one-third, mostly since 1950. Tropical forests have been reduced by half, the fastest vegetational change of this magnitude in human history. Forestry has so far been dominated by private interests, commercial for the most part. Certain of these interests could well have an expanded role in the future, but public interests deserve to be better represented in the policy arena, especially the fast-growing interests at a global level. Myers is an environmental consultant based in Oxford, UK. (v6,#2)

Myers, Norman, "Environmental scientists: advocates as well?" Environmental Conservation 26(no. 3, Sept 01 1999):163- . (v.11,#1)

Myers, Norman, on the challenge side, and Vincent, Jeffrey R. and Panayotou, Theodore on the distraction side, "Consumption: Challenge to Sustainable Development ... or Distraction," Science 276 (4 April, 1997):53-57. Myers maintains that the problem triad of population, environment, and development is now being joined by consumption, and that first world standards of escalating consumption cannot be extended to the rest of the world, nor even maintained in the first world. Vincent and Panayotou reply that there are no inherent limits to consumption, so long as there is substitutability and recycling. Countries with high consumption also have better environmental quality, lower pollution levels, and so on. Eastern Europe, the most polluted environment in the world, was a low-consumption society. Third World nations, with dramatic environmental degradation can also be low-consumption societies. Myers replies that the Vincent and Panayotou scenario depends on markets, overlooks market externalities, and the gross inequities in who benefits from marketed consumption, and cannot be extrapolated to a global range. Myers is an environmental consultant, at Oxford University. Vincent and Panayotou are at the Harvard Institute for International Development. (v8,#2)

Myers, Norman, and Kent, Jennifer. Environmental Exodus: An Emergent Crisis in the Global Arena. Washington, DC: The Climate Institute, 1995. 214 pages. $ 15.00 ISBN 0-9623610-2-X. (Climate Institute, 324 Fourth St., NE, Washington, DC 20002. Phone 202/547-0104. Fax 202/547-0111. A startling study made by the Climate Institute, and funded by numerous authorities: The U.S. Department of State, the Environmental Protection Agency, the United Nations Environment Programme, the United Kingdom Overseas Development Administration, the Rockefeller Foundation, and others. About 25 million people have been uprooted for environmental causes, a number that exceeds the official total of 22 million refugees who have fled civil wars and persecution. Environmental refugees are those who are forced to leave traditional habitat that has been rendered temporarily or permanently unsuitable to support human life, usually through the depletion of water, soil, and forests. The primary exodus has been from
portions of Africa's Sahel, India, China, Central America, and the Horn of Africa. Environmental breakdown rarely is the sole catalyst, but combines with poverty, repressive politics, and inequitable land tenure, in a struggle for the control of available resources. With a bibliography of over 1,000 references documenting the conclusions of the study. Myers is an environmental consultant and visiting fellow, Green College, Oxford University. Kent is a research assistant on this project. Commentary in: Douglas, David, "Environmental Eviction," Christian Century 113 (11-18 Sept. 1996): 839-41. (v7, #3)


Myers, Norman. "Environmental Unknowns." Science 269(1995):358-360. The most important environmental problems will probably include many unknown to us now. It is important not only to have answers to recognized questions but to ask new questions. (v6,#3)


Myers, Robert, Ruark, Greg, and Backiel, Adela, "Developing an Enduring American Agriculture," Natural Resources and Environment 12 (Fall 1997):110-. (v.8,#4)


Myerson, Allen, "U.S. Splurging on Energy After Falling Off its Diet," New York Times (10/22/98): A1. America's splurging energy use. In the 1970s and early 80s, the U.S. reduced its energy consumption even while population grew and the economy expanded. People installed thicker insulation and tighter windows, appliances and engines were made more efficient, business cut its energy use, and people wore sweaters instead of turning up their thermostats. After falling dramatically in the 1970s and early 80s, average American energy use is back up to nearly record levels (despite some gains in energy efficiency). Here are some of the reasons why. Energy prices today are lower than they were 25 years ago. Adjusting for inflation, gas is $1 a gallon today compared to $1.10 in 1973. A gallon of gasoline is now cheaper than a gallon of bottled water! U.S. gas prices are half what they are in Europe and Japan and U.S. consumers use twice as much energy per person as do the Europeans or the Japanese. Although houses are more energy efficient per square foot, they are getting bigger. Since 1970, average household size shrunk by one sixth and average new home sizes has grown by a one third (from 1600 to 2100 square feet). Standard ceiling height has gone from eight to nine feet. Like the trend in sports utility vehicles (SUVs), we can't seem to make houses big enough. Furthermore, homes are now stuffed with energy-hungry features. Air conditioners are now in 80% of homes (up from 40%), 57% of homes now have dishwashers (up from 17%), plus many
homes now have Jacuzzis, security systems, computers, an on and on. Many of these gadgets suck electricity full time; they are never really off (though dormant, they are ready at the push of a button). Today in the U.S., energy consumption per person in the home is the same as in 1973. Electric utilities are now cutting the reimbursements they used to give for installing more efficient heating, cooling, and lighting.

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

With greater energy use comes greater dependence on foreign oil (now 50%, up from 35% in 1973) and increasing military expense of defending access to it. The more energy we use, the more difficult it will be to try to stem possible global warming. The U.S. is committed to reducing our greenhouse gas output by 7% (from 1990) levels by the year 2010; this is a 33% cut in projected growth of our greenhouse emissions. Our energy use also is responsible for oil pipe lines and drilling platforms in environmentally sensitive areas, and thus this use contributes to oil spills and related environmental degradation. Finally, almost all of the energy we use comes from fossil fuels, which are not a renewable source of energy and hence such a lifestyle is not a sustainable one. (v.9,#4)

Myhr, Anne Ingeborg, and Traavik, Terje, "Genetically modified (GM) crops: Precautionary science and conflicts of interests," Journal of Agricultural and Environmental Ethics 16(2003):227-247. Risk governance of GM plants and GM food products is presently subject to heated scientific and public controversies. Scientists and representatives of the biotechnology industry have dominated debates concerning safety issues. The public is suspicious with regard to the motives of scientists, companies, and political institutions involved. The dilemmas posed are nested, embracing value questions, scientific uncertainty, and contextual issues. The obvious lack of data and insufficient information concerning ecological effects call for application of the Precautionary Principle (PP). One of our major conclusions is that precautionary GMP usage requires risk assessment criteria yet undeveloped, as well as broader and more long-term conceptions of risk, uncertainty, and ignorance. KEY WORDS: conflicts of interests, genetically modified (GM) plants, GM food, the Precautionary Principle, public trust, scientific uncertainty, substantial equivalence. (JAEE)

Myhr, Anne Ingeborg and Traavik, Terje, "Sustainable development and Norwegian genetic engineering regulations: Applications, impacts, and challenges," Journal of Agricultural and Environmental Ethics 16(2003):317-335. The main purpose of The Norwegian Gene Technology Act (1993) is to enforce containment of genetically modified organisms (GMOs) and control of GMO releases. Furthermore, the Act intends to ensure that "production and use of GMOs should take place in an ethically and socially justifiable way, in accordance with the principle of sustainable development and without detrimental effects to health and the environment." We have investigated the extent to which the sustainability criteria were decisive for the destiny of one approved and one declined application of genetically modified plant release. KEY WORDS: consensus conferences, GMO regulation, the Norwegian Gene Technology Act, the notion of
equal distribution, the Precautionary Principle, public perception, scientific uncertainty, sustainable development. (JAEE)

Myhr, Anne Ingeborg, and Traavik, Terje, "The Precautionary Principle: Scientific Uncertainty and Omitted Research in the Context of GMO Use and Release," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):73-86. Commercialization of genetically modified organisms (GMOs) have sparked profound controversies concerning adequate approaches to risk regulation. Scientific uncertainty and ambiguity, omitted research areas, and lack of basic knowledge crucial to risk assessments have become apparent. The objective of this article is to discuss the policy and practical implementation of the Precautionary Principle. A major conclusion is that the void in scientific understanding concerning risks posed by secondary effects and the complexity of cause-effect relations warrant further research. Initiatives to approach the acceptance or rejection of a number of risk-associated hypotheses is badly needed. Further, since scientific advice plays a key role in GMO regulations, scientists have a responsibility to address and communicate uncertainty to policy makers and the public. Hence, the acceptance of uncertainty is not only a scientific issue, but is related to public policy and involves an ethical dimension. KEY WORDS: extended consent, GMO, Precautionary Principle, omitted research, scientific uncertainty, secondary effects. Myhr and Traavik are with the Department of Microbiology and Virology, University of Tromso and Norwegian Institute of Gene Ecology, Tromso, Norway. (JAEE)

Myskja, Bjorn K., "The Moral Difference between Intragenic and Transgenic Modification of Plants," Journal of Agricultural and Environmental Ethics 19(2006):225-238. Public policy on the development and use of genetically modified organisms (GMOs) has mainly been concerned with defining proper strategies of risk management. However, surveys and focus group interviews show that although lay people are concerned with risks, they also emphasize that genetic modification is ethically questionable in itself. Many people feel that this technology "tamper with nature" in an unacceptable manner. This is often identified as an objection to the crossing of species borders in producing transgenic organisms. Most scientists reject these opinions as based on insufficient knowledge about biotechnology, the concept of species, and nature in general. Some recent projects of genetic modification aim to accommodate the above mentioned concerns by altering the expression of endogenous genes rather than introducing genes from other species. There can be good scientific reasons for this approach, in addition to strategic reasons related to greater public acceptability. But are there also moral reasons for choosing intragenic rather than transgenic modification? I suggest three interrelated moral reasons for giving priority to intragenic modification. First, we should respect the opinions of lay people even when their view is contrary to scientific consensus; they express an alternative world-view, not scientific ignorance. Second, staying within species borders by strengthening endogenous traits reduces the risks and scientific uncertainty. Third, we should show respect for nature as a complex system of laws and interconnections that we cannot fully control. The main moral reason for intragenic modification, in our view, is the need to respect the "otherness" of nature. Keywords: biotechnology - ethics - intragenic - natural species - transgenic.

Myskja is in the Department of Philosophy, NTNU Trondheim, Trondheim, Norway. (JAEE)


Nabhan, Gary Paul, Cultures of Habitat. Washington, DC: Counterpoint, 1997. "The term habitat is etymologically related to habit, inhabit, and habitable, it suggest a place worth dwelling in one that has abiding qualities. ... culture implies that we learn from our elders and neighbors a way of living that is more refined or better adapted than our genes alone can offer" (p. 3). (v.11,#1)

pollinators have consistently provided our croplands and wildlands with the kind of support that has kept our country fruitful. Let us remember them every time we smell a poppy, or take a bite into a delicious, red apple or munch on almonds. Let us now praise the not-so-famous pollinators, and honor our collective debt to them" (p. 15). A theme developed at more length in Nabhan and Buchmann, The Forgotten Pollinators. Nabhan is director of science at the Arizona-Sonora Desert Museum. (v7,#1)


Nabhan, Gary Paul, ed. Counting Sheep: Twenty Ways of Seeing Desert Bighorn. Tucson: University of Arizona Press, 1993. 260 pages. $ 16.95 paper. $ 29.95 cloth. Twenty persons from different disciplines and cultures focus their attention on just one animal, the desert bighorn. (v4,#3)


Naburrs, GJ; Paivinen, R; Schelhaas, MJ; Pussinen, A; Verkaik, E; Lioubimow, A; Mohren, F, "Nature-Oriented Forest Management in Europe: Modeling the Long-Term Effects," Journal of Forestry 99(no. 7, 2001):28-34. (v.13,#1)


not imply any definite opinion on questions of unconditional goodness of nature as a set of ecosystems." "If adequate ecological knowledge were available, some of us would not hesitate to interfere on a large scale against intense and persistent pain." Naess would not interfere with most predation or parasitism, but thinks there are exceptions. He would, if he could, eliminate a reindeer parasite, Cephenomyia trompe, an insect whose larvae grow in the noses of reindeer and slowly suffocate them. "What do humans do when witnessing animals in what they think is unnecessary and prolonged pain? Those who intensively identify with the victims try to rescue them--provided it is not too late and a practical way is seen. Generalized, and made into a policy, rescue attempts would not amount to an attempt to interfere and reform nature." "Respect for the dignity of free nature and proper humility do not rule out planned interference on a greater scale, as long as the aim is a moderation of conditions of extreme and prolonged pain, human or nonhuman. Such pain eliminates the experience of a joyful reality. The higher levels of self-realization of a mature being require assistance to other living beings to realize their potentialities, and this inevitably actualizes concern for the sufferers." Naess is professor emeritus of philosophy at the University of Oslo and the founder of deep ecology. (v2,#1)

Naess, Arne, "Beautiful Action: Its Function in the Ecological Crisis." Environmental Values Vol.2 No.1(1993):67-72. ABSTRACT: The distinction made by Kant between 'moral' and 'beautiful' actions is relevant to efforts to counteract the current ecological crisis. Actions proceeding from inclination may be politically more effective than those depending on a sense of duty. Education could help by fostering love and respect for life. KEYWORDS: Beautiful actions, deep ecology, environmental education, Kant. Council for Environmental Studies, University of Oslo, PO Box 1116, Blindern 0317, Oslo 3, Norway.

Naess, Arne, "Living a Life that Reflects Evolutionary Insights," Conservation Biology 10(1996):1557-1559. A brief tribute to Michael Soulé. "The postulation of the inherent value of living beings and their diversity is contested by people who say that all value assertions are subjective. ... At our latest meeting it was refreshing to listen to Michael Soulé claim that conservation biology evidently is both a science and an assertion that biodiversity--a central concern of the science--is not an instrumental value but has value in itself. ... Why can't conservation biology announce the noninstrumental inherent value of biodiversity?" Naess originated the deep ecology movement and is professor emeritus, University of Oslo. (v7,#4)


Naess, Arne, "A Defence of the Deep Ecology Movement," Environmental Ethics 6(1984):265-270. An answer to the charges made by Watson (see 1983). Naess rests his case on the non-academical character of Deep Ecology philosophy--it is not a precise university exercise, and Watson is wrong to treat it as such. But that is just the problem with Deep Ecology: if it is to be accepted by the intellectual community, it needs to be more precise. (Katz, Bibl # 1)

Naess, Arne, Ecology, Community and Lifestyle: Outline of an Ecosophy. Translated and edited by David Rothenberg. Cambridge: Cambridge University Press, 1989. Pp. xiii, 223. This is an updated and revised version of Naess' 1976 Norwegian work of the same title; many sections have been re-written by Naess and Rothenberg, and it includes a new introduction by Rothenberg. This is the most complete expression of the philosophy of "deep ecology" by the leading thinker in the field; its availability in English is the most important development in recent years. Unlike the fragmentary articles by Naess that have been published previously, this book
develops the full argument for Ecosophy T, the world-view that supports the practical platform of deep ecology. It is made clear that deep ecology is much less a system of ethics than a theory of ontology and epistemology: it is the use of ecological thinking in the construction and apprehension of the world. The central ecological insight is a relational ontology, combined with an epistemology of gestalt experience. Gestalt thinking permits the integration of fact, emotion, and value into our basic understanding of the world, and it sets the foundation for a wider identification with all of reality.

This, in turn, leads to the derivation of the key norm and ultimate goal of the system, Self-realization, where Self is conceived as "an unfolding of reality as a totality" (p. 84), with a goal of perfection. In three "less philosophical" chapters, Naess shows how this world-view can lead to practical programs in the fields of technology, economics, and politics. He concludes the book with a systematic sketch of the norms and basic principles of his personal variant of deep ecology, Ecosophy T: intrinsic value; unity, diversity, and complexity; identification with nature; and self-realization. This text greatly increases the philosophical rigor of the system of deep ecology, but the chief problem remains the starting point of immediate experience and intuition. Naess and Rothenberg each see this as an advantage, for it permits the development of personal ecosophies leading to the common practical platform of deep ecological action. Intuition is also the fundamental source of value in the total-view descriptions of the world. But it is unclear how the starting points of personal experiences/intuitions can avoid a relativity of value and world-view. Thus, fundamental differences in the practical platform should develop. (Katz, Bibl # 2)


Naess, Arne, The Selected Works of Arne Naess. Volumes 1-10 Edited by Harold Glasser with assistance from Alan Drengson in cooperation with the author. The Netherlands, Spring, 2005. Publication made possible through a grant from the Foundation for Deep Ecology. The individual volumes are not available separately, the whole set must be purchased. The current price for all ten volumes from Springer is US $1,900. ISBN: 1-4020-3727-9. Volumes:
Vol 2: Scepticism: Wonder and Joy of a Wandering Seeker.
Vol 5: Gandhi and Group Conflict: Exploration of Nonviolent Resistance, Satyagraha.


Naess, Arne. "A Defence of the Deep Ecology Movement." Environmental Ethics 6(1984):265-70. There is an international deep ecology social movement with key terms, slogans, and rhetorical use of language comparable to what we find in other activist "alternative" movements today. Some supporters of the movement partake in academic philosophy and have developed or at least suggested philosophies, "ecosophies," inspired by the movement. R. A. Watson does not distinguish sufficiently between the movement and the philosophical expressions with academic pretensions. As a result, he falsely concludes that deep ecology implies setting man apart from nature--a kind of "anthropocentrism" in his terminology: humans and only humans have no right to interfere with natural processes. What the deep ecology movement insists on is rather that life on Earth has intrinsic value and that human behavior should and must change drastically--and soon. Naess is retired from the philosophy department, University of Oslo, Oslo, Norway. (EE)


Nagiecki, Janusz. "Bread and Freedom: Agriculture in Poland." The Ecologist 26, no.1 (1996): 13. During the Communist era, Poland's farmers successfully resisted efforts to collectivize agriculture. As a result, small, family farms are still the norm in Poland and chemical use is rare. But market liberalization now threatens to succeed where Communism failed. In the name of increased "efficiency", the government--following the advice of the World Bank, IMF and other development agencies--aims to displace the peasantry with large, specialized farms geared towards export. (v7, #3)


Nagy, Kelsi, *Values in Action: A Philosophic Analysis of Moral Motivation in Two Classics of Environmental Literature*. M.A. Thesis, Colorado State University, Fall 2005. Neither Kant's ethics nor utilitarianism gives a convincing account of how people are motivated to act as moral agents. Environmental literature is often a more successful way to motivate people to accept the environment as an object of moral concern. This thesis analyzes Thoreau's *Walden* and Leopold’s *A Sand County Almanac*, using Harry G. Frankfurt’s theory that a free action requires that a person engage in reflection, choose which value she wants, then is effectively motivated by the freely chosen value. Thoreau and Leopold use literature to engage the reader into reflection on values, specifically those economic and scientific values that have an effect upon our actions toward the environment. Narrative discourse can lead people to reflect on values that effectively motivates action in a way that, while different than philosophic argumentation, may be an equally important discourse for moral motivation. The advisor was Holmes Rolston.

Naiman, Robert J., Rogers, Kevin H. "Large Animals and System-Level Characteristics in River Corridors," *Bioscience* 47(no.8, 1997):519. (v8,#3)

Naiman, Robert J., "Riparian Ecology and Management in the Pacific Coastal Rain Forest," *Bioscience* 50(no. 11, Nov. 1, 2000):996- . (v.12,#2)


Nakamura, Masahisa. "Preserving the Health of the World's Lakes," *Environment* 39(no.5, 1997):16. Although the current state of the world's lakes is fairly alarming, a concerted international effort could reverse the trend toward degradation. (v8,#2)

Nakamura, Keigo; Tockner, Klement; Amano, Kunihiko, "River and Wetland Restoration: Lessons from Japan," *BioScience* 56 (no.5, May 2006): 419-429 (11). River and wetland restoration has emerged as a worldwide phenomenon and is becoming a highly profitable business. Researchers worldwide know a lot about restoration practices in Europe and the United States, but have only scant information about the activities in Japan, where more than 23,000 river restoration projects have been conducted during the past 15 years. Here we provide an overview of the various restoration activities in Japan and discuss the lessons that we can draw from them.

Nally, Rm; Fleishman, E, "A Successful Predictive Model of Species Richness Based on Indicator Species," *Conservation Biology* 18(no.3, 2004):646-654. (v. 15, # 3)


Nantel, P., Bouchard, A., Hay, S. "Selection of Areas for Protecting Rare Plants with Integration of Land-Use Conflicts: A Case Study for the West Coast of Newfoundland, Canada. *Biological Conservation* 84(no.3, 1998):233-. (v9,#2)

Narayanan, Vasudha, "'One Tree is Equal to Ten Sons': Hindu Responses to the Problems of Ecology, Population, and Consumption," *Journal of the American Academy of Religion* 65(1997):291-332. A reality check on India with overpopulation and dwindling reserves. Hindus of every stripe have participated in polluting the environment. An account of the resources and limitations within the many Hindu traditions to see how the interconnected problems of overpopulation, ecology, and consumption/consumerism can and have, to some extent, been addressed. The many Hindu theological texts and philosophical systems do contain engaging accounts of reality which, if understood and acted upon directly, could serve as fantastic resources for several social and moral problems. But, regrettably, in the Hindu contexts, these have limited power over ethical behavior. Narayanan is in religion at the University of Florida, Gainesville.


Narveson, Jan. "The Case for Free Market Environmentalism." *Journal of Agricultural and Environmental Ethics* 8(1995):145-156. Environmental Ethics is the ethics of how we humans are to relate to each other about the environment we live in. The best way to adjust inevitable differences among us in this respect is by private property. Each person takes the best care of what he owns, and ownership entails the free market, which enables people to make mutually advantageous trades with those who might use it even better. Public regulation, by contrast, becomes management in the interests of the regulators, or of special interests, such as lovers of rare species -not the people they're supposed to be serving. (JAEE)


one of the most important, on the frontier of ethics. It points to the fundamental task of redefining responsible human relationships with the rest of the planet's biota, and grounding these human responsibilities not only, weakly, in human utility or even generosity, but also, strongly, in the just dues and demands imposed on us by the vital interests of other kinds. Biotic rights highlight the centrality of ecological justice, rather than solely benevolence. Nash is Director of the Churches' Center for Theology and Public Policy, Washington. (v4,#4)


Nash, James A., "Toward the Ecological Reformation of Christianity," Interpretation: A Journal of Bible and Theology 50 (no. 1, January 1996): 5-15. Christian theology and ethics are largely inadequate to confront the ecological crisis of today. They are in need of reformation. At the center of Christian faith, we shall not find a mandate to pollute, plunder, and prey on the rest of nature. Instead, we shall discover that the core affirmations endow all life with a moral significance that entails human responsibility toward the whole of nature.


Nash, Madeline J., "The Fish Crisis," Time, August 11, 1997, pp. 65-67. The oceans that once seemed a bottomless source of high-protein, low-fat food are rapidly being depleted. (v8,#3)


Nash, Roderick Frazier, The Rights of Nature: A History of Environmental Ethics. Madison: University of Wisconsin Press, 1989. Pp. xiii, 290. This is a work of intellectual history, not philosophy. It catalogues the growth of the idea that non-human nature deserves moral consideration, with a primary focus on American environmentalism and its antecedents in Great Britain. The book is a rich source of bibliographic and historical material, and it provides excellent summaries of the positions and arguments of philosophers, environmentalists, and other social reformers. The book has one major flaw: Nash commits himself to a model of "moral extensionism" based on the expansion of classical liberalism and "natural rights" theory. He attempts to explain all the moral positions concerning non-human nature as variations of the growth of individual human rights. But much of environmental ethics cannot be contained in such a restrictive, individualistic model, and Nash's text demonstrates this. He repeatedly cites positions that do not call for the rights of nature: "While Thoreau avoided the word `rights'...(p. 37); "McGee was referring to the right of people to use nature, not the rights of nature..." (p. 50); Women "shy away from that staple of the liberal credo, individual rights" (p. 146). Because of this restrictive perspective, Nash mis-reads much of the current eco-philosophical literature (in Chapter 5, "The Greening of Philosophy," pp. 121-160). He conflates the ideas of individual rights, intrinsic worth, and communal holism, thus seemingly equating philosophers as diverse as Arne Naess, Paul Taylor, and Baird Callicott. Contains excellent notes and bibliographic essay. (Katz, Bibl # 2)


Nash, Roger, "Adam's Place in Nature: Respect or Domination?", *Journal of Agricultural Ethics* 3(1990):102-113. The creation story in Genesis speaks of humankind being given dominion over nature. Does this support the view that nature has solely instrumental value, and is of worth only insofar as it serves the necessities and conveniences of the human species? It is argued that these images, in their qualification and enrichment of each other develop the idea that animals are of worth independently of their usefulness to us. Other key parts of the Bible, that at first may seem to promote unfettered domination, are shown to be more properly read as supporting an animal-benign religious ethics. Nash is in philosophy at Laurentian University, Ontario.


Naskrecki, Piotr, *The Smaller Majority: The Hidden World of the Animals that Dominate the Tropics.* Cambridge, MA: Harvard University Press, 2005. The "non-charismatic" megafauna of tropic ecosystems, though most of the species would fit in a matchbox. Many, though photographed here, are unidentified or undescribed. The author hopes that the volume will help the public appreciate the beauty and importance of small animals, a first step toward their conservation.

Nasmyth, G, "Amazon Crime: Deep in the Amazon rainforest, a corrupt mayor and a band of pirate loggers are stealing impoverished settlers' land and stripping it of the trees on which they depend," *Ecologist* 34(no.4, 2004):24-29. (v. 15, # 3)

Nasr, Seyyed Hossein, "The Spiritual and Religious Background of the Environmental Crisis," *The Ecologist* 30 (No. 1, Jan 01 2000): 18-. The present environmental crisis is above all a conceptual and spiritual crisis. By adopting a worldview that separates humanity from Nature we have come to see what was previously a sacred Earth as a resource to be exploited for economic ends. (v.11,#2)

Nasr, Seyyed Hossein, *Religion and the Order of Nature.* New York: Oxford University Press, 1996. 320 pp. $18.95 paper. The historical process through which Western civilization moved away from the idea of nature as sacred and embraced a world view that sees humans as alienated from nature and nature itself as a machine to be dominated and manipulated by humans. Nasr's goal is to negate the totalitarian claims of modern science and its reductionist view of nature and to re-open the way to the religious view of the order of nature, developed over centuries in the cosmologies and sacred sciences of the great religious traditions. Each tradition has a wealth of knowledge and experience concerning the order of nature. They have in common the conviction that nature is sacred. The recovery of this knowledge would allow religions all over the globe to enrich each other and cooperate to heal the wounds inflicted upon the Earth in the current environmental crisis. Nasr is in Islamic studies at George Washington University. (v7,#4)

Nasr, Seyyed Hossein. *Religion and the Order of Nature.* New York: Oxford University Press, 1996. 320pp. $18.95 paper, $65 cloth. Nasr argues that the devastation of our world has been exacerbated, if not actually caused, by the reductionist view of nature that has been advanced by modern secular science. He advocates the recovery of the truth that nature is sacred. (v8,#1)

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

Nassauer, Joan Iverson. "Messy Ecosystems, Orderly Frames." Landscape Journal 14, no. 2 (1995): 161-70. Many native ecosystems and wildlife habitats violate cultural norms for the neat appearance of landscapes in that they look "messy" and unkempt. Good landscape architecture can place these messy ecosystems in orderly cultural frames, that give "cues to care," like a neat white fence around a wildlife area. This makes them more culturally acceptable. Nassauer is in landscape architecture at the University of Minnesota. (v7, #3)


National Estuary Program: Bringing Our Estuaries New Life. A brochure describing one of the U.S. Environmental Protection Agency’s foremost efforts in ecosystem management. National Clearinghouse for Environmental Publications and Information, 11029 Kenwood Road, Building 5, Cincinnati, OH 45242. (v6,#1)

National Fish and Wildlife Foundation. 1977 Directory of Birding Festivals. 30 pages. Some 80 premier events throughout North America celebrating birds, usually with field trips, such as seeing 20,000 sandhill cranes, or 300 bald eagles, or thousands of migrating hawks. Published by National Fish and Wildlife Foundation, 1120 Connecticut Ave., NW, Suite 900, Washington, DC 20036. 202/857-0166. Fax 202/857-0162. Also available at http://www.nfwf.org (v8,#1)

National Forum, Vol. 70, No. 1 (Winter 1990) is a special issue on "Preserving the Global Commons." This is the national magazine of the Honor Society of Phi Kappa Phi, Box 16000, Louisiana State University, Baton Rouge, LA 70893. Among other authors, Lester Brown lists the six most pressing environmental problems, while Julian L. Simon argues that population growth is not bad for humanity. (v1,#1)

National Geographic, September 2004, vol. 206, no. 3, is a theme issue on Global Warming. 74 pages by various authors, often featuring the effects of global warming on wildlands, wildlife, wilderness, biodiversity, ecosystem processes, in addition to the effects on people. (v.14, #4)


National Research Council. Environmental Effects of Transgenic Plants: The Scope and Adequacy of Regulation. Washington: National Academy Press, 2002. A Report of the Committee on Environmental Impacts Associated with Commercialization of Transgenic Plants. One of the leading authors/committee members is Paul B. Thompson, Department of Philosophy, Purdue University. Modern agricultural practices have substantial negative aspects, but the current standards used by the federal government to assure the safety of transgenic plants is higher than the standards used in assuring safety of other agricultural practices and technologies. Still, this does not mean the standard for transgenics is too high. In general older practices and technologies were not scrutinized well enough. The measurement of both hazard and exposure involves a complex blend of ecological and social factors. There is a need for both rigorous scientific analysis and communication of these results to the public. The report is neither simple black nor white, but offers various ways in which a functioning system can be improved. (v.13,#2)


Native Plants Journal is a new journal, concerned with native plant conservation, restoration, reforestation, landscaping, highway corridors, and, generally, with the appreciation and understanding of native plants on landscapes. The first issue appears Spring 2000. Contact: http://www.its.uidaho.edu/nativeplants/

Native Plants Journal is a new journal, concerned with native plant conservation, restoration, reforestation, landscaping, highway corridors, and, generally, with the appreciation and understanding of native plants on landscapes. The first issue appears Spring 2000. Contact: http://www.its.uidaho.edu/nativeplants/ (v10,#4)


Nature-Sciences-Sociétés is a new journal produced by the French Centre National de Recherche Scientifique. The Centre with the journal hopes to bring about greater interdisciplinary research and action between the natural and social sciences, with application to environmental issues. Papers will be in French and occasionally in English. Contact: Agnes
Pivot, NSS Association, GRS/CNRS, Universite Paris X - Bat G, 92001 Nanterre Cadex, France. (v3,#4)

Natureza & Conservação, Revista Brasileira de Conservação da Natureza, The Brazilian Journal of Nature Conservation. Biennial, bilingual (Portuguese and English) scientific journal. E-mail: natureza&conservacao@fundacaoboticario.org.br
ISSN 1679-0073 (v. 15, # 3)


Naughton-Treves (Naughton-Treves), Lisa, and Sanderson, Steven, "Property, Politics and Wildlife Conservation," World Development 23 (no. 8, 1995):1265-1275. Wildlife conservation and property rights. A summary of the historical development of wildlife property rights. The political determination of property regimes is critical to conservation, especially in regard to wild fauna. Property rights concerning wild fauna differ from other property rights claims, including landed property, intellectual property, and rights governing the use of wild flora. No single property form is adequate for wildlife conservation. Property as an institution is incomplete; the exceptional character of wild fauna and the property rights that govern it are organic. The authors are at the University of Florida, Gainesville. (v.10,#2)


Nawa, Richard, "The Value of Wild Steelhead," Fly Rod and Reel, April 1991, pages 29-31, 76-77. "Government agencies have a price for everything but know the value of nothing." "The complex and dynamic nature of stream habitat is ignored in favor of management by numbers." (v2,#1)

Naylor, Raymond L., Williams, Susan L., and Strong, Donald R., "Aquaculture--A Gateway for Exotic Species," Science 294(23 November 2001):1655-1656. The farming of fish, shellfish, and aquatic plants is among the fastest growing segments of the food economy, taking place internationally and in all fifty U.S. states. Accidental escapes and purposeful releases create biological poison with irreversible and unpredictable biological impacts--seaweed in Hawaii, Asian carp established in rivers in the Mississippi basin, introduced salmon, alien mollusks, all these with parasites and alien species hitchhiking with them--are creating ecological havoc. Regulation is a quagmire, and a clear and enforced policy on exotic introduction sis needed as aquaculture expands. Naylor is at the Center for Environmental Science and Policy, Stanford University; Williams and Strong at Bodega Marine Laboratory, University of California, Davis. (v.13,#1)

Naylor, Rosamond, et al., "Losing the Links Between Livestock and the Land," *Science* 310 (9 December 2005): 1621-1622. The industrial livestock sector has become footloose, no longer tied to a local landscape base for feed inputs or to supply manure and fertilizers. Animals are raised in confinement with no immediate links to the local landscape, as are 75% of the world's eaten poultry, 66% of its eggs, 40% of its pork. Livestock remains the biggest user of land, cows and sheep graze on the land where they live. But this is steadily shifting to feed crops that may be shipped hundreds or thousands of miles to the livestock that eat them. Naylor is in environmental science, Stanford University.


Needham, E.A. & Lehman, Hugh, "Farming Salmon Ethically", *Journal of Agricultural and Environmental Ethics* 4(1991):78-81. Salmon farming is a rapidly expanding industry. In order for it to develop in an ethical manner, many ethical issues must be confronted. Among these are questions regarding the quality of life of salmon on farms. To develop reasonable answers to these questions considerable thought must be devoted to developing appropriate standards of care for salmon. If these questions are not addressed the results could be bad both for salmon and for salmon farmers.


Nees, Dan, Valerie E. Green, Kim Treadway, John Lafferty, Michelle Vanyo, Paul Date, and Robert Hunt Sprinkle. "Activism, Objectivism, and Environmental Politics." *Environmental Ethics* 25(2003):295-312. Environmental activism, like all great activisms, is fundamentally normative, its principal beliefs contestable, its most powerful arguments rebuttable on the grounds that they are subjective. Environmental activists, as political tacticians with complex goals, have become skilled at presenting objectified versions of their own motivations when trying to broaden support for specific policies or take advantage of regulatory or legal opportunities. While instrumentally tempting and often expedient, this practice of objectifying moral arguments is in some respects disingenuous, and its successes as well as its failures bring with them characteristic risks, short-term and long-term. (EE)

Negri, Valeria, "Agro-Biodiversity Conservation in Europe: Ethical Issues," *Journal of Agricultural and Environmental Ethics* 18(2005):3-25. Diversity in agro-ecosystems is under threat. This paper is focused on the biodiverse agro-ecosystems generated by landraces (LRs), i.e., farmer-developed populations of cultivated species that show among- and within-population diversity and are linked to traditional cultures. The aim of this work is to arouse concern about their loss, to explain how they can be conserved, and to discuss values that support maintaining and/or restoring on-farm agro-biodiversity. This is discussed with particular reference to the European situation. Keywords biodiversity - complexity - ethics - landraces - on-farm conservation - sustainability. Negri is in biology and agro-environmental biotechnology, Universita delgi Studi, Perugia, Italy. (JAEE)
Neill, Warren. “An Emotocentric Theory of Interests.” *Environmental Ethics* 20(1998):163-82. It is plausible to hold that ethical obligations are concerned with bringing about the existence of things that have value, where something is of value if and only if it is in the interest of some entity. Here the notion of an interest may be defined as whatever contributes to the well-being of a morally significant entity. I argue that interests are limited to individuals with the capacity for affective response. After briefly distinguishing between various different types of value, I defend this emotocentric theory of interests against objections raised by Paul Taylor and Gary Varner, both of whom grant interests to a larger class of entities. I argue that there are serious problems with attempts to associate interests with mere goal-directedness or with the mere possession of biological functions. Neill is in philosophy, State University of West Georgia, Carrollton, GA. (E&E)

Neill, Warren, “An Interest-Satisfaction Theory of Value,” *Ethics and the Environment* 3(1998):55-80. In this paper I argue that all value is rooted in the interests of valuing beings. If something satisfies an interest of a valuing entity by contributing to its well-being in some way, then it has value. Anything that fails to satisfy any interests is entirely lacking in value. I defend this conception of value by showing that the usual arguments directed against this kind of view are lacking in force, and by considering various other theories of value and showing that they suffer from serious problems. Finally, I clarify some important distinctions between intrinsic, extrinsic, inherent, and instrumental value. Warren is in philosophy, State University of West Georgia, Carrollton, GA. (E&E)

Neilson, R. P., et al., "Forecasting Regional to Global Plant Migration in Response to Climate Change," *Bioscience* 55(no.9, September 2005): 749-760. The rate of future climate change is likely to exceed the migration rates of most plant species. The replacement of dominant species by locally rare species may require decades, and extinctions may occur when plant species cannot migrate fast enough to escape the consequences of climate change. Such lags may impair ecosystem services, such as carbon sequestration and clean water production. Thus, to assess global change, simulation of plant migration and local vegetation change by dynamic global vegetation models is critical, yet fraught with challenges.


the challenge that many nonhumans are on a moral par with mentally handicapped humans, and hence are equally immune from being unwilling sources of vital organs (the so-called "marginal cases" argument). Arthur Caplan has offered perhaps the most interesting counter to this argument, which appeals in part to differences in patterns of sensibility - in brief, humans would tend to suffer more if their children, handicapped or not, were used as organ sources than would nonhuman parents. It is argued that his defence cannot fully meet the weight of the strongest moral challenges to xenograft, in part because it does not address the distinction between what we "do" care about, and what we "should" care about.

Nelson, James Lindemann. "Health and Disease as `Thick' Concepts in Ecosystemic Contexts." Environmental Values 4(1995):311-322. I consider what kind of normative work might be done by speaking of ecosystems utilising `medical' vocabulary - drawing, that is, on such notions as 'health', 'disease', and 'illness'. Some writers attracted to this mode of expression have been rather modest about what they think it might purchase. I wish to be bolder. Drawing on the idea of `thick' evaluative concepts as discussed by McDowell, Williams and Taylor, and resorting to a phenomenological argument for a kind of moral realism, I argue that the project of developing a robust understanding of the moral significance of recognising the health or illness of ecosystems is definitely a starter. KEYWORDS: Ecosystem health, intrinsic value, 'thick' evaluative concepts. Nelson is in the department of philosophy, University of Tennessee. (EV)


Nelson, Lance, ed., Purifying the Earthly Body of God: Religion and Ecology in Hindu India. Albany, NY: State University of New York Press, 1998. Includes: --Nelson, Lance, "The Dualism of Nondualism: Advaita Vedanta and the Irrelevance of Nature" (pp. 61-88). "First, I will show the falsity of the suggestion that Advaita Vedanta finds spiritual value inherent in nature. I will then proceed to explain precisely how Shankara nd his tradition devalue the natural world and how ... the world is not revered but rather tolerated until it passes completely away. My conclusion will be that this is not the kind of nondualism that those searching for ecologically supportive modes of thought might wish it to be" (p. 68). Nelson is in religious studies at the University of San Diego.


Nelson, Michael P., "Holists and Fascists and Paper Tigers...Oh My!," Ethics and the Environment 1(no.2, 1996):103-117. Over and over, philosophers have claimed that environmental holism in general, and Leopold's Land Ethic in particular, ought to be rejected on the basis that it has fascistic implications. I argue that the Land Ethic is not tantamount to environmental fascism because Leopold's moral theory accounts for the moral standing of the individual as well as "the land," a holistic ethic better protects and defend the individual in the long-run, and the term "fascism" is misapplied in this case. Nelson teaches philosophy at the University of Wisconsin, Stevens Point. (E&E)
Nelson, Michael P., "Aldo Leopold, Environmental Ethics, and the Land Ethic," *Wildlife Society Bulletin* 26(no. 4, 1998):741-744. Leopold, though with no formal training in philosophy, made numerous contributions not only to environmental ethics but also to the concept of nature and the human relation to nature more broadly, the connection between a worldview and an ethics. Leopold is Darwinian, seeing humans as social animals in relation to their landscapes, biotic communities entwined with social communities. "Ecology represents nature as a biotic community; it reveals that humans are members of a nonanthropocentric, biotic community. For Leopold, the Land Ethic was the appropriate response to the recognition of biotic communities." Nelson is in philosophy at the University of Wisconsin-Stevens Point. (EE v.12,#1)


Nelson, Michael P. "A Defense of Environmental Ethics: A Reply to Janna Thompson." *Environmental Ethics* 15(1993):245-57. Janna Thompson dismisses environmental ethics primarily because it does not meet her criteria for ethics: consistency, non-vacuity, and decidability. In place of a more expansive environmental ethic, she proposes to limit moral considerability to beings with a "point of view." I contend, first, that a point-of-view centered ethic is unacceptable not only because it fails to meet the tests of her own and other criteria, but also because it is precisely the type of ethic that has contributed to our current environmental dilemmas. Second, I argue that the holistic, ecocentric land ethic of Aldo Leopold, as developed by J. Baird Callicott, an environmental ethic that Thompson never considers, nicely meets Thompson's criteria for acceptable ethics, and may indeed be the cure for our environmental woes. Nelson is at the department of Philosophy, University of Colorado, Boulder, Colorado. (EE)


Nelson, R. J. "Ethics and Environmental Decision Making." *Environmental Ethics* 1(1979):263-78. Environmental ethics tends to be dominated by the idea that the right environmental actions require a change in the value systems of many people. I argue that the "rebirth" approach is perverse in that moral attitudes are not easily changed by moral suasion. A properly ethical approach must begin where we are, as moderately moral people desiring the best for all. The real ethical problem is to develop procedures for collectively defining environmental ends that will be fair to the parties participating in the decision process. This idea is essentially utilitarian, and depends on the maximization of expected social utility. This type of environmental ethics is contrasted with current theories of social choice in welfare economics and with Rawls' theory of justice as fairness. Nelson is in the philosophy department, Case Western Reserve University, Cleveland, OH. (EE)


Nelson, Robert H., "Unoriginal Sin: The Judeo-Christian Roots of Ecotheology," *Policy Review*, Summer 1990, no. 53. Environmental issues are becoming more important in the churches, but the new trends in environmental theology veer toward secularism, paganism, and Asian religions in a "pantheistic veneration of nature" "in which humanity must be understood as part of and not distinct from nature." But nature is red in tooth and claw, and at the same time, in "virtual self-contradiction" to the urged immersion of humans in nature, "the actual goal of environmentalism is the opposite: to inculcate a new morality with respect to the natural world that is found nowhere else in nature."

"The real source of the appeal of environmentalism may be that it offers traditional religious messages of the West in a new secular form--a form that, in an age of rampant secularism, lends these traditional messages great authority." Deep ecology is a kind of secular faith, with a version of the fall of humans from primitive innocence into technological greed and sin, alienated from an Eden Earth. For environmentalists, "save" means both "preserve" and "curb the influence of evil." "Reunion with nature for many in the current age has assumed the traditional meaning of reunion with God." The religious ascetic tradition also returns in environmental "preaching that material possessions and the good life are unnatural and to this extent evil." "Current environmental theology suggests that the poor should be content with their condition and are perhaps even better off for it." In fact, the Biblical stewardship theme, in which humans are distinct from and with dominion over nature, commissioned to tend and build a worldly residence, though disliked by deep environmentalists and ecotheologians, is the only adequate theological model for the protection and conservation of nature. *Policy Review* is published by the conservative think-tank, The Heritage Foundation, Washington. (v1,#4)

Nel, Robert H., "The Religion of Forestry: Scientific Management," *Journal of Forestry* 97(no. 11, Nov 01 1999):4- . The USDA Forest Service was established by progressive interests whose guiding philosophy was scientific management. This management strategy is no longer appropriate, requiring a basic rethinking of the place of the agency in American government. Commentary: Thomas, Jack Ward and Burchfield, James, "Comments on "The Religion of Forestry: Scientific Management," *Journal of Forestry* 97(no. 11, Nov 01 1999):10- . (v.11,#1)


Nepstad, D., et al., "Frontier Governance in Amazonia," *Science* (25 January 2002):629-631. Economic development in Amazonia, especially with the development of paved roads, seems inevitable, even desirable in the light of the needs of the 17 million people in the region. Recent Brazilian legislation and land use policy could at the same time conserve 70-80% of the rainforest. Whether this happens depends on developing better frontier governance. The fragile gains in conservation and sustainable development are threatened by institutional weaknesses
and rural violence. But there are some positive signs. All of the authors are with the Instituto de Pesquisa Ambiental da Amazônia, Belém, Para, Brazil. (v.13,#1)


Nepstad, D., Azevedoramos, C; Lima, E; McGrath, D; Pereira, C; Merry, F, "Managing the Amazon Timber Industry", Conservation Biology 18 (no.2, 2004): 575-577.

Nepstad, Daniel C., et al. (11 other authors), "Large-scale Impoverishment of Amazonian Forests by Logging and Fire," Nature 398(8 April 1999):505-508. Field surveys that map wood mills and forest burning areas in the Brazilian Amazon show that logging crews severely damage 10,000 to 15,000 square kilometers per year of forest that are normally not documented. In dry years this leaves up to 270,000 square kilometers vulnerable to future burning, and potentially doubles net carbon emissions during severe El Nino episodes. Nepstad is at the Woods Hole Research Center, Woods Hole, MA. (v.7,#4)

Nerlich, Brigitte, and Nick Wright, "Biosecurity and Insecurity: The Interaction between Policy and Ritual During the Foot and Mouth Crisis," Environmental Values 15(2006): 441-462. In 2001 a highly infectious animal disease, foot and mouth disease, broke out in the UK and spread rapidly. In May, when the spread seemed to be slowing down, new disease hotspots appeared in previously little affected regions, such as North Yorkshire. New biosecurity rules were imposed. Based on a series of semi-structured interviews with stakeholders, this article shows that the biosecurity measures farmers implemented during the epidemic meant more than just reducing the risk of spreading FMD. For many, cleansing and disinfecting became Foot and Mouth. Biosecurity actions became invested with symbolic values and, in particular, were ritualised as part of the symbolic spatial construction of an otherwise 'invisible' enemy. (EV)

Nesse, Randolph M., and George C. Williams, Why We Get Sick?: The New Science of Darwinian Medicine. New York: Times Books, Random House, 1994. Also New York: Vintage Books, 1996. Published in the U.K. as Evolution and Healing: The New Science of Darwinian Medicine. London: Weidenfeld and Nicolson, 1995. Human food habits and other behavioral propensities were shaped in the Pleistocene Period and this gets us in trouble in today's environment. For example, a predisposition to consume fat and sugar when available contributed to survival then, but to obesity, diabetes, and heart disease today. Various diseases result from a mismatch between our original environment and that in which we live today. In general, we have an evolved tendency to consume nature as we have opportunity, which spells ecological disaster today. Nesse is a physician in psychiatry at the University of Michigan Medical School. Williams is a well-known evolutionary biologist.

Nestle, Marion, Food Politics: How the Food Industry Influences Nutrition and Health. Berkeley: University of California Press, 2002. How the food industry turns wholesome natural ingredients into sweet, fatty and salty products. The American food supply is so abundant that we can feed everyone in this country twice over, even after subtracting food exports. The result forces food
companies into fierce competition for consumer dollars. The foods most profitable to the industry are those that cater to our desires. The irony and tragedy is that this pattern, repeated in other developing countries, has resulted in the number of overweight people in the world, 1.1 billion, now equaling the number of undernourished people. Nestle is chair of nutrition studies at New York University and was an editor of the Surgeon General’s Report on Nutrition and Health, 1988. (v.13, #3)

Nettle, Daniel and Romaine, Suzanne, Vanishing Voices: The Extinction of the World's Languages. New York: Oxford University Press, 2000. The last 500 years have seen the extinction of half the world's languages, and one of the remaining 6,000 disappears every week. How language becomes endangered and why the loss of linguistic diversity matters. (v.12,#2)


Neumann, Christopher J. "Successor Liability and CERCLA: The Runaway Doctrine of Continuity of Enterprise," Environmental Law 27(no.4, 1997):1373-. The doctrine of successor liability and the corresponding continuity of enterprise exception in the context of CERCLA liability. Neumann criticizes the extensive use of the continuity of enterprise exception and argues that only the traditional successor liability doctrine should apply in CERCLA cases. (v9,#2)

Neumann, Roderick P., Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa. Berkeley: University of California Press, 1998. 271 pages. $ 35 cloth. Arusha National Park in northern Tanzania illustrates all the political-ecological struggles in Africa. The roots of the ongoing struggle between the park on Mount Meru and the neighboring Meru peasant communities go much deeper than the issues of poverty, population growth, and ignorance usually cited. By imposing a European idea of pristine wilderness, establishing such national parks and protected areas displaced Africa meanings as well as material access to the land. An analysis of the symbolic importance of natural landscapes among various social groups and how it relates to conflicts between peasant communities and the state. Neumann is in international relations at Florida Atlantic University. (Africa). (v.9,#3)


Nevers, Patricia, Gebhard, Ulrich, and Billmann-Mahecha, Elfreide, "Patterns of Reasoning Exhibited by Children and Adolescents in Response to Moral Dilemmas Involving Plants, Animals and Ecosystems," Journal of Moral Education 26(no. 2, 1997):169-186. The values and attitudes that children and adolescents have toward nature has been insufficiently researched, despite the fact that there is a growing body of philosophical theory in environmental ethics that might provide a framework for such analysis. The authors outline basic positions in environmental ethics (largely from the English literature) and formulate survey questions addressed to German children and adolescents. One finding is widespread anthropomorphism (not anthropocentrism) in children up to 10-11 years of age, regarding plants as well as animals. Children's fascination with animals is striking. Children have difficulty weighing personal interests against those of certain animals, such as dogs and rabbits. Children and adolescents can defend the interests of other animals and plants (biocentric reasoning), but there is no unequivocal evidence that they can be ecocentric. Nevers and Gebhard are at the University of Hamburg, and Billmann-Mahecha at the University of Hanover, Germany. (v.13,#2)
New Ground: A Journal of Development and the Environment has just been launched in South Africa as a journal with a black perspective on environmental conservation. The first issue was September 1990. Address: P. O. Box 62054, Marshalltown 2017, South Africa. (v1,#4)

New Ground: A Journal of Development and the Environment is a journal with a black perspective on environmental conservation and sustainable development. Published by an independent trust, the Environmental and Development Agency Trust. Address: P. O. Box 322, Newtown 2113, South Africa. ISSN 1016-8075. Editor: Dick Cloete. (v6,#3)

New Road, The is the bulletin of the World Wildlife Fund's Network on Conservation and Religion. Six issues each year. Internationally oriented. Short articles and news, names of contact persons, in attractive newspaper format. Contact: The New Road, 10 rue des Fosses, CH-110 Morges, Switzerland. (v1,#2) Now discontinued.

New York Times, "Cover-Up on Clean Air," October 6, 2004, editorial. The Bush administration has pushed the Environmental Protection Agency to reduce protection from industrial plants, here involving requirements to upgrade emissions protection when plants are upgraded. Congress asked for a review and an EPA inspector general, Nikki Tinsley, has issued a report quite critical of the administration. (v.14, #4)


New York Times, "Surrender in the Forests," July 18, 2004, p. 12. Lead Editorial. "The Bush Administration has taken apart so many environmental regulations that one more rollback should not surprise us. Even so, it boggles the mind that the White House should choose an election year to dismantle one of the most important and popular land preservations of the last 30 years--a Clinton administration rule that placed 58.5 million acres of the national forests off limits to new road building and development.

There are no compelling reasons to repudiate that rule and no obvious beneficiaries besides a few disgruntled Western governors and the timber, oil and gas interests that have long regarded the national forests as profit centers. It's not even a case of election-year pandering to Western voters; indeed, early returns suggest that most Westerners below the rank of governor do not like the Bush proposal at all." (v. 15, # 3)


New York Times, "Roadblock at Yucca Mountain," editorial, August 23, 2004, p. A22. How safe should nuclear waste storage be? A federal appeals court has overthrown the Environmental Protection Agency standard of 10,000 years (twice recorded human history) in favor of a standard of hundreds of thousands of years. In 1992 the U.S. Congress told EPA to set the standard based upon and consistent with the recommendations of the National Academy of Sciences, an unusual delegation of authority to a non-governmental agency. The NAS recommends hundreds of thousands of years for Yucca Mountain, a proposed underground storage site in Nevada. (v. 15, # 3)

The debate over whether the Navy’s use of sonar to detect submarines is harming whales continues in the waters off the southeastern United States, where the Navy hopes to establish a training area for sailors who need to practice their sonar skills in a shallow ocean environment. Evidence is mounting that sonar has been responsible for at least some of the whale strandings around the world.

New York Times, "Nature Besieged," August 2, 2004, A20. Editorial. A Bush Administration proposal to require each national forest to confine motorized off-road vehicles to designated trails, instead of allowing them to roam free, is commended. There are now 10 million such vehicles. (v. 15, #3)

New York Times: "A New Way of Living With Nature." December 19, 1999. Editorial on "what can loosely be called the environmental ethic": "A century that will be remembered for material and scientific progress may also be remembered for something more modest—as a moment when mankind, realizing that the earth’s resources were not finite and perhaps seeking expiation for years of predatory behavior, struck a truce with nature. For the first time since the dawn of the industrial age there was, at least in the West and certainly in America, a rough armistice between the forces of economic growth and the forces of preservation. ... Having discovered that we can actually change the way nature operates, we have also discovered that with this power comes a sacred obligation to restore what we once nearly ruined." (v10,#4)

Newberry, Beatrice, "Running with gorillas," The Ecologist 30 (No. 4, 2000): 44-45. A unique conservation project in West Africa (Gabon) is turning the received wisdom about gorilla survival on its head, and may provide new hope for the survival of the great apes. (v.12,#3)

Newell, Josh, Wilson, Emma. "The Russian Far East: Foreign Direct Investment and Environmental Destruction." The Ecologist 26(Mar.1996):68. Powerful multinational and national interests are turning Russia’s Far East into a "resource colony" for the Pacific Rim economies. In a mad dash for cash, the region's timber, gold, coal, oil and gas are being exploited, causing widespread environmental destruction and a few local benefits. (v7,#2)


Newhart, Dave, "China's Crane Experiment," *International Wildlife* 31 (no. 1, Jan./Feb. 2001):20-27. When wealth trickles up, people's lives improve, and so do prospects for a revered bird. Controversies that were intense a few years ago between rural farmers in China and managers of reserves to protect the black-necked crane have moderated, and farmers and conservationists are now partners rather than enemies. A big part of the solution has been grants to increase education, food production, health care, tourism, and appreciation for one of China's most widely honored birds. (EE v.12,#1)

Newkirk, Ingrid, *Save the Animals! 101 Easy Things You Can Do*. New York: Warner Books, $4.95 paper. Animals "are not inferior to human beings but rather just different from us, and they really don't exist for us nor do they belong to us." (v1,#4)


Newman, Peter. "Greening the City: The Ecological and Human Dimensions of the City Can Be Part of Town Planning." *Alternatives* 22, no.2 (1996): 10. Making our cities more liveable entails making them both greener and more convivial--an opportunity to revitalize a rich tradition from the pre-modern era. (v7, #3)


Newmark, William D., "Insularization of Tanzanian Parks and the Local Extinction of Large Mammals," *Conservation Biology* 10(1996):1549-1556. The pattern of local extinction of large mammals in Tanzanian Parks strongly suggests that the increasing insularization of the parks as a result of habitat alteration, human settlement, agricultural development, and the active elimination of wildlife on adjacent lands has been an important contributing factor. Newmark is at the Utah Museum of Natural History, University of Utah, Salt Lake City. (v7,#4)


*Newsweek*, "Loved to Death: How the Fight to Save Endangered Species Can Backfire," April 12, 1993. Ways in which the attention give to endangered species can make them more desirable for poachers, hunters, or more liable to provoke retaliation and other takings that jeopardize the species further. (v4,#1)


environmental sensitivity with a focused and gracious life. Newton teaches ethics at Fairfield University, Fairfield, CT. (v.13, #3)


Newton, Lisa H. and Catherine K. Dillingham, Watersheds: Classic Cases in Environmental Ethics. Belmont, CA: Wadsworth, 1993. 249 pages. Paper. Nine pivotal events that have much to tell us about our relationship with Earth: Love Canal, the ozone layer and its depletion, UNCED at Rio, the Exxon Valdez, the Northwest forests and the spotted owl, Chernobyl, Chico Mendez and the tropical rainforests, the global greenhouse and our changing climate, Bhopal. Environmental complexity, the biological, economic, and legal issues, damage done irrevocably to real people and the land they depend on. How such disasters could be prevented and what they teach us philosophically about how we do and ought to live on Earth. Impressive detail and documentation of the cases combined with insightful ethical analysis. Both authors are at Fairfield University. (v4,#3)


Ng, Yew-Kwang. "Towards Welfare Biology: Evolutionary Economics of Animal Consciousness and Suffering", Biology and Philosophy 10(1995):255-285. Welfare biology is the study of living things and their environment and respect to their welfare, defined as net happiness minus suffering. Despite difficulties of ascertaining and measuring welfare and relevancy to normative issues, welfare biology is a positive science. Evolutionary economics and population dynamics are used to help answer basic questions in welfare biology. Ng is in economics at Monash University, Melbourne, Australia. (v7,#4)


Nicholas, JC, Juergensmeyer, JC, "Market Based Approaches to Environmental Preservation: To Environmental Mitigation Fees and Beyond", Natural Resources Journal 43 (no.3, 2003): 837-864.


Nicholson, Charles F., Robert W. Blake, and John Schelhas, "Environmental Impacts of Livestock in the Developing World," Environment 43(no.2, March, 2001): 7-. The combination of population growth and rising demands for meat and dairy products is increasing stress on the environmental and natural resources. How can the world produce enough food while minimizing deforestation, loss of biological diversity, and greenhouse gas emissions. (v.12,#3)
Nickel, James W. and Viola, Eduardo, "Integrating Environmentalism and Human Rights." Environmental Ethics 16(1994):265-273. The environmental and human rights movements have valuable contributions to make to each other. Environmentalists can contribute to the greening of human rights by getting the human rights movement to recognize a right to a safe environment, to see humans as part of nature, and to begin considering the idea that nature may have claims of its own. The human rights movement can contribute to environmentalism by getting environmentalists to recognize that they have strong reasons to support rights to political participation, freedom from violence, due process of law, education, and adequate nutrition. Nickel is with the Dept. of Philosophy, University of Colorado, Boulder. Viola is with the Dept. of Political Science and International Relations, University of Brasilia. Brazil. (EE)

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. (v5,#4)

Nickler, Patrick A., "A Tragedy of the Commons in Coastal Fisheries: Contending Prescriptions for Conservation, and the Case of the Atlantic Bluefin Tuna." Boston College Environmental Affairs Law Review 26(No. 3, Spring 1999):549-. The Atlantic Ocean's population of bluefin tuna is under severe stress, and an international commission recommends no fishing for juvenile fish of this species for the indefinite future. But implementing this under the current management system is particularly ineffective. (v10,#4)

Nicklin, Christopher G. J., Moral Possibility After Nihilism: a Deconstruction of Ethics and Epistemology, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)


Niebuhr, Richard H., "Cosmic Patriotism," Religion and Values in Public Life: A Forum from Harvard Divinity School, vol. 2, no. 1, Fall 1992 (and mailed as a supplement to the Harvard Divinity Bulletin vol. 23, no. 1, 1993. "We seem to stand now at a fork in the path that we of the West have followed up to this point. One branch of the fork leads us toward continuing to treat the environment (and ourselves) as instrumental values. This is the path of prudence or prudential morality and religion. Evidently, it is the path on which both of our political parties wish to lead us. The other branch of the fork leads us into a future that we cannot forecast. All that we can dimly discern is that it leads to a way of conducting ourselves, a way of valuing our environment, our globe, not as instrumental to our desires but as beautiful and good: not a beauty and good belonging to us but a system of beauty and good to which we belong. Following this path would lead to a religious revolution, to a new attitude that William James called `cosmic
patriotism’. With a long quotation from Aldo Leopold’s "Thinking Like a Mountain." Niebuhr is professor of divinity at Harvard Divinity School.

Nielsen, Annika Porsborg, Jesper Lassen and Peter Sandøe, Democracy at its best? The consensus conference in a cross-national perspective. @ Journal of Agricultural and Environmental Ethics 20(2007):13-35. Over recent decades, public participation in technology assessment has spread internationally as an attempt to overcome or prevent societal conflicts over controversial technologies. One outcome of this new surge in public consultation initiatives has been the increased use of participatory consensus conferences in a number of countries. Existing evaluations of consensus conferences tend to focus on the modes of organization, as well as the outcomes, both procedural and substantial, of the conferences they examine. Such evaluations seem to rest on the assumption that this type of procedure has universally agreed goals and meanings, and that therefore consensus conferences can readily be interpreted and applied across national boundaries. This article challenges this approach to consensus conferences. The core of the article is a study of national differences in ideas about what constitutes legitimate goals for participatory arrangements. The study looks at three consensus conferences on GMOs, which took place in France, Norway, and Denmark. Drawing on this study, the article discusses the ways in which interpretations of the concept of participation; the value attributed to lay knowledge vs. technical expertise; as well as ideas about the role of the layperson, are all questions that prompt entirely different answers from country to country. Further, the article analyses these national differences within a theoretical framework of notions of democratic legitimacy. Keywords: Public participation - consensus conference - GMO - cross-national evaluation - participatory technology assessment - TA - deliberative democracy - models of democracy - democratic legitimacy - lay and expert knowledge. The authors are at the Danish Centre for Bioethics and Risk Assessment, Royal Veterinary and Agricultural University, Copenhagen, Denmark.


attempt to restore a wilder feeling to the Park, Yosemite National Park in California is proposing a major reduction in parking spaces, roads, bridges and buildings and planning to remove a dam obstructing the flow of the Merced River. The plan is a scaled back version of an earlier attempt to ban most private cars in Yosemite Valley, an attempt that led to major public opposition. With 4 million visitors last year, Yosemite suffers from overcrowding, traffic jams, and air pollution that almost violates U.S. Environmental Protection Agency standards. In the past, rangers have lowered the gates to the park to prevent more cars from entering. New parking lots outside the Park would be built from which visitors could take shuttle buses into the valley. U.S. Interior Secretary Bruce Babbitt claims the plan aims to "adapt visitors to the needs and forces of nature in the valley, rather than the other way around." The plan's goals are to reduce traffic congestion, reclaim natural beauty, allow natural processes to prevail, promote visitor understanding and enjoyment, and reduce overcrowding. Some conservation groups are critical of the plan, opposing the new parking spaces, additional restaurant space, and the diesel bus system. Says renown conservationist David Brower, "This plan has smoke, mirrors and hesitation in it, and as we all know he who hesitates is lost, and is ready to make a down payment on the liquidation of the earth." (v.11,#1)

Nieves, Evelyn, "A Roundup of Wild Horses Stirs Up a Fight in the West," New York Times (2/25/02): A1. Wild horses in America: pest or symbol of the west? 46,000 wild horses and burros roam the American West. They are descendants of horses used by cowboys and Indians, pioneers and miners, ranchers and explorers. While some see these horses as a living legacy of the Wild West others view them as exotic pests who destroy the western range and steal grass from cattle and sheep. A decades old debate rages between these two viewpoints. The Bureau of Land Management manages these horses and is trying to resolve the issue by capturing half the herd and putting them up for adoption. This is necessary, they say, so that the habitat can be preserved for all animals who graze on it, including cattle and sheep owned by private ranchers who pay for grazing rights on public lands.

Animal welfare advocates and the dozen or so wild horse protection organizations oppose this herd reduction program and have filed a lawsuit to prevent it. They object that the agency first factors in all the other users of the habitat before it comes up with its view of an "appropriate management level" for horses. They also view the adoption program as woefully inadequate, claiming that there are not enough takers for the horses, that public awareness of the program is insufficient, and that despite the BLM's regulations, adopted horses too often end up in slaughterhouses. The Fund for Animals says its investigations show that most of the adopted horses end up in Canadian slaughterhouses for which there are no records. A 1997 investigation by the Associated Press found that BLM officials allowed the slaughter of hundreds of adopted wild horses and falsified records to thwart investigators.

Radical animal rights groups firebombed a BLM corral and tore down fences to protest the roundups. Wild horse opponents are fierce in their opposition as well. A spokesperson for the National Cattlemen's Beef Association says: "The problem with wild horses running around is they screw up improvements such as water tanks and water developments. They run down fences. With their broad feet, they destroy water springs and other things consistent with historical grazing use." One might also argue that because the horses were brought over by Europeans and have not co-evolved with the land for a sufficient period, they are exotics that do not belong on the range. (v.13,#2)


Nightingale, Paul C. "Negotiating Contracts for the Purchase and Sale of Contaminated Property." Natural Resources and Environment 10, no.4 (1996): 11. (v7, #3)
Niiniluoto, Ilkka, "Nature, Man, and Technology--Remarks on Sustainable Development," Arctic Centre Publications 6(1994):73-87, in a theme issue on The Changing Circumpolar North: Opportunities for Academic Development, Lassi Heininen, ed. Rovaniemi, Finland. The human responsibility for nature as related to sustainable development. The Brundtland Commission report does not make sufficiently explicit how its recommendations are based upon factual and value premises. Environmental research can give facts but the choice of environmental policy has to be derived from theories of justice and of environmental ethics. To save our planet for future generations, ethical concerns have to be extended beyond human-centered instrumental values toward communal and ecocentered intrinsic values. Niiniluoto is a faculty dean and philosopher at the University of Helsinki. (v5,#2) (Finland)


Nilsson, Annika and Rose, Joanna, "Environmental Researchers Wait Anxiously for Salvation," Science 283(1999):924. Environment and environmental research in Sweden. Environmental research has long been eminent in Sweden, but a fierce debate is raging over who should control environmental science. Researchers are waiting to see if their previously generous funding will be restored. (v10,#1)

Nilsson, A. Ultraviolet Reflections: Life Under a Thinning Ozone Layer. Chichester, U.K.: John Wiley and Sons, 1996. 152 pp., 14.99. The effects of increasing UV radiation on people, plants, and animals. Nilsson takes the reader on a journey from the Antarctic ozone hole to the Arctic birch forest to see how plants and microbes will fare against increasing UV radiation. He raises questions about the evolution of our immune system and uncovers scientific controversy over the causes of eye diseases.


Nissani, Moti "The Greenhouse Effect: An Interdisciplinary Perspective," Population and Environment: A Journal of Interdisciplinary Studies 17 (1996): 459-489. For a shorter, updated version, see "The Greenhouse Effect Revisited," in Theodore Goldfarb, ed., Taking Sides: Clashing Views on Controversial Environmental Issues. Guilford, CT: Dushkin, 1997, 7th edition. A typical current argument is that even if the greenhouse threat is real, even if temperatures rise and low-lying lands must be protected forever by an enormous system of dikes, such unlikely occurrences do not justify imposing vast costs on the present generation. We rather have, so the argument runs, a stronger obligation to help developing countries overcome the environmental problems that they are facing today. The author argues that anyone willing to cross disciplinary boundaries can easily ascertain that this surprisingly popular viewpoint is mistaken.

A case study in environmental history: the CFC ozone link is instructive. The nature of, evidence for, and the largely uncertain consequences of, the enhanced greenhouse effect on Earth are considered. For argument's sake, a conservative and arbitrary estimate is adopted, assuming that the chances of adverse greenhouse consequences within the next century are 10%; those of a catastrophe, 1%. Such chances should not be taken, because there is no conceivable reason for taking them. The steps that will eliminate the greenhouse threat will also save money and cut pollution, accrue many other beneficial consequences, and only entail negligible negative consequences. Humanity is risking its future for less than nothing. Claims that the greenhouse threat involves hard choices, that it is value-laden, or that it cannot be
resolved by disinterested analysis, are tragically mistaken. Given the stakes of the greenhouse debate--the future of humanity--concerned scholars and citizens ought to understand this issue. (v7,#4)

Nissani, Moti, "Brass-Tacks Ecology," *The Trumpeter* 14(no 3, 1997):1543-148. Environmental reform has failed, for two important reasons. First, the great majority of environmental thinkers ignore concrete political realities. Instead they are caught up in debates about the significance of one or another proximate cause of the environmental crisis (human domination of nature, overpopulation). The environmental movement is bereft of a core practical philosophy guiding its actions. Second, environmentalists misconstrue political realities, concentrating on this or that specific issue (the Endangered Species Act, water pollution), when the real problem is an economic and political system in which money counts as the bottom line. With some sobering illustrations from both business and politics. Nissani is in the Interdisciplinary studies Program, Wayne State University, Detroit. (v8,#4)

Nissani, M. "Brass-tacks Ecology." *The Trumpeter* 14, no. 3 (1997): 143-48. The author argues that environmentalists should focus their energies and resources on, and join other humanitarians in, an all-out campaign to eradicate private money from American politics. (v8,#3)


Nixon, Will, "The Species Only a Mother Could Love," *The Amicus Journal* 21 (no. 2, Summer 1999):28-32. "Freshwater mussels are the most endangered order of animals in the country. Does anybody give a damn?" 10% of species are already extinct. 70% of the remaining 300 species are at risk. 69 species are formally protected under the Endangered Species Act. One problem: "It's hard to feel sorry for a mussel. It is simply not that easy to get worked up about a cold-blooded, gluey morsel of mollusk flesh lodged in a drab brown shell at the bottom of a creek." Other problems: Dams and degraded rivers and streams. (v.12,#3)


Noal, Fernando Oliveira, Reigota, Marcos, and Barcelos Valdo Hermes de Lima, compilers, *Tendências da Educação Ambiental Brasileira (Trends in Brazilian Environmental Education).* Santa Cruz do Sul (Brazil): EDUNISC, published by the University of Santa Cruz do Sul Press, 1998. In Portuguese. Website contacts: info@unisc.br; www@unisc.br. Publisher's address: Avenida Independencia, 2293, 96815-900 Santa Cruz do Sol - RS, Brazil. Fax: (051) 717-1855. 14 articles by different contributors, including articles on Amazonia. (v10,#4)


Nockles, Joan M. "Katie John v. United States: Redefining Federal Public Lands in Alaska." Environmental Law 26, no.2 (1996): 693. Nockles analyzes the Ninth Circuit's majority and dissenting opinions in Alaska v. Babbitt, the official name for what is referred to in Alaska as the Katie John dispute. She argues that the majority opinion should have held that waters in which the United States holds a navigational servitude are "federal public lands" to which the Alaska National Interest Lands Conservation Act's rural subsistence priority must attach. Absent that finding, she concludes that an administrative solution will rectify the court's errors. (v7, #3)

Noe, Egon, Niels Halberg and Jens Reddersen, "Indicators of Biodiversity and Conservational Wildlife Quality on Danish Organic Farms for Use in Farm Management: A Multidisciplinary Approach to Indicator Development and Testing," Journal of Agricultural and Environmental Ethics 18(2005):383-414. Organic farming is expected to contribute to conserving national biodiversity on farms, especially remnant, old, and undisturbed small biotopes, forests, and permanent grassland. This objective cannot rely on the legislation of organic farming solely, and to succeed, farmers need to understand the goals behind it. A set of indicators with the purpose of facilitating dialogues between expert and farmer on wildlife quality has been developed and tested on eight organic farms. Combined with a dialogue process, using these indicators could be an important key component of a farm wildlife management advisory tool. Key words biodiversity - conservational wildlife quality -farm management - indicators - organic farming - weed. The authors are in the Department of Agroecology, Danish Institute of Agricultural Sciences, Tjele, Denmark. (JAEE)


Nogales, M; Martin, A; Tershy, BR; Donlan, CJ; Veitch, D; Puerta, N; Wood, B; Alonso, J, "A Review of Feral Cat Eradication on Islands", Conservation Biology 18 (no.2, 2004): 310-319.


Nolt, John. "The Move from Good to Ought in Environmental Ethics." Environmental Ethics 28(2006):355-374. The move from good to ought, a premise form found in many justifications of environmental ethics, is itself in need of justification. Of the potential moves from good to ought surveyed, some have considerable promise and others less or none. Those without much promise include extrapolations of obligations based on human goods to nonsentient natural entities, appeals to educated judgment, precautionary arguments, humanistic consequentialist arguments, and justifications that assert that our obligations to natural entities are neither directly to those entities nor derived from our obligations to humans. Some arguments that extrapolate obligations based on goods involving sentience from humans to sentient animals are promising, but whether they are sufficient is controversial. Gandhian and Aristotelian arguments are also promising, provided we can justify their ought premises. (EE)
Nolt, John, A Land Imperiled: The Declining Health of the Southern Appalachian Bioregion. Knoxville: University of Tennessee Press, 2005. Detailed study of environmental loss and degradation in the Southern Appalachians; air, water, biota, population and urbanization, food, energy, consumption and waste, transportation, future prospects. At times Nolt writes with co-authors, specializing in particular areas, and always he writes with a philosopher's eye for ethical and value issues as he overlooks past and present in a region he loves. Nolt teaches philosophy at the University of Tennessee, Knoxville.


Norchi, D., and D. Bolze, Saving the Tiger: A Conservation Strategy. WCS Policy Report Paper No. 3. New York: Wildlife Conservation Society (at the Bronx Zoo), 1995. Trade in tiger parts and continuing human pressures on tiger habitats are the primary factors responsible for declining tiger numbers. Key recommendations are improved law enforcement, relocating humans out of tiger habitat, building walls and other deterrents to keep local people and their cattle out of tiger reserves, policing against poachers, and conservation education of consumers of tiger products and local communities living near tiger habitat. There is insufficient political commitment to tiger conservation. (v8,#2)

--Jernelöv, Arne, "The Environmental Protection in Recent History," pp. 31-37.


Heeger, Robert, "Respect for Animal Integrity?" pp. 243-252.

Gustafsson, Bengt, "The Value of Looking in Other Directions," pp. 255-263. The viewpoint of a concerned scientist.

Thurdin, Gorel, "Ethics, Spiritual Values and a Political Will: Any Concern of Scientists?, pp. 267-273. The viewpoint of a concerned politician. (v9,#1)


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. (v5,#4)

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. (v5,#4)


Preston, Christopher J. "Environment and Belief: The Importance of Place in the Construction of Knowledge," Ethics and the Environment 4(1999):211-218. In his popular first book, The Spell of the Sensuous, David Abram (1996) calls on us to recognize the encompassing earth "in all its power and its depth, as the very ground and horizon of all our knowing." By reemphasizing the connection between knowing and the earth, Abram hopes to encourage a more engaged existence with the flora, fauna, and landscapes among which we reside. Given that the earth is literally the ground and horizon of all our knowing, it makes sense--in fact, it is good for the senses--to consider for a while how the places in which we know come to exert their influence upon the constructions that we call knowledge. This paper is a sketch of a larger project to illustrate the epistemic significance of geography. Preston is in philosophy at the University of South Carolina, Columbia.


Norgaard, RB and Baer, P, "Collectively Seeing Climate Change: The Limits of Formal Models," BioScience 55 (no. 11, November 2005): 961-966. Understanding the risks posed by anthropogenic climate change and the possible societal responses to those risks has generated a prototypical example of the challenge of "collectively seeing complex systems." After briefly examining the ways in which problems like climate change reach the scientific and public agenda, we look at four different ways in which scientists collectively address the problem: general circulation models, integrated assessment models, formal assessments (e.g., the Intergovernmental Panel on Climate Change), and distributed learning networks. We examine strengths and limitations of each method, and suggest ways in which a greater awareness of the need for plural approaches could improve the basis for learning and decisionmaking.


Norgaard, Richard B., Development Betrayed: The End of Progress and a Coevolutionary Revisioning of the Future. New York: Routledge, 1994. $ 18.95 paper. $ 59.95, cloth. 280 pp. A critique of modernity's vision of progress. Modernity's naive construction of integrated planning is wrapped-up in an unrealistic, monistic model of progress that dooms it to failure. The betrayal of progress is in our choice of an unsound process of development, not in the goals themselves. Like King Midas, in our pursuit of real and significant fruits, we failed adequately to consider the negative side effects: significant environmental degradation, increasing difficulty satisfying even basic human needs, and failing strategies for addressing cultural diversity. Chapter 6 is "The Philosophical Roots of Betrayal": atomism, mechanism, monism, objectivism, and universalism. In the second half of the book, Norgaard proposes a coevolutionary cosmology, replacing atomism with holism, mechanism with the systems concept, universalism with contextualism, objectivism with subjectivism, and monism with conceptual pluralism. Reviewed by Harold Glasser in Environmental Values 5(1996):267-270. Norgaard is president-elect of the International Society of Ecological Economics.

Norgaard, Richard B., "Environmentalism as the Salvation of Materialism," CTNS (Center for Theology and the Natural Sciences) Bulletin 16 (No. 3, Summer 1996):10-17. Environmental problems are typically framed as problems of spoiling or running out of the stuff needed for people's material sustenance in the future. Al Gore's Earth in the Balance offers a provocative illustration of how insidious materialism is, even for the best intentioned reflections on the environment. How will we move beyond materialism if we navigate from a map provided by a materialist science? By addressing the moral issues related to our material realities, the churches can heal important wounds. Additionally, the churches can help us recreate a sense of community, and thereby facilitate a collective revisioning of the future. Norgaard teaches in the Energy and Resources Program at the University of California, Berkeley, and is president of the International Society for Ecological Economics, of which he is a founder. (v7,#4)


Norlock, Kathryn, "The Atrocity Paradigm Applied to Environmental Evils," Ethics and the Environment 9(no. 1, 2004):85-93. "While I am persuaded both by the theory of evil advanced by Claudia Card in "The Atrocity Paradigm" and by the idea that there are evils done to the environment, I argue that the theory of evil she describes has difficulty living up to her claim that
it `can make sense of ecological evils in the victims of which include trees and even ecosystems.'" Norlo ck is in philosophy St. Mary's College of Maryland. (E&E)


Norman Myers and Julian L. Simon, Scarcity or Abundance: A Debate on the Environment. New York: W. W. Norton, 1994. 254 pages. Julian Simon continues his famous offer to bet that "just about any trend pertaining to material human welfare will improve rather than get worse," and challenges betters to "pick the index." Myers replies that there are twice as many people on the planet as there were forty years ago, with many more now living in poverty and suffering, and 1.5 billion in absolute poverty. The betting is inappropriate, for the wealthy North, one-fifth of the world consuming four-fifths of its goods; human deprivation is quite evident for the four-fifths of the world that consumes one-fifth of its goods. Maybe environmentalists should bet this situation will worsen, and hope that they lose their bets. (v6,#4)

Normile, Dennis and Charles C. Mann, "Asia Jockeys for Stem Cell Lead," Science 307(4 February 2005):660-664. A major reason why Asian scientists are advancing in stem cell research is that "Asian countries are less encumbered by the ethical dilemmas that have hamstrung research in the West."

Norris, Kathleen, Dakota: A Spiritual Geography. Ticknor and Fields, 224 pages. $ 19.95. Norris is from Lemmon, South Dakota, 1,600 people, the largest town in an area twice the size of Massachusetts. Though reared first in New York, she has lived there twenty years, and knows both worlds. She finds the great plains a world where things are timeless and deep, offering gifts of grace and revelation, despite the usual perception that the Dakotas are stuck in an earlier, less relevant age. The plains are a sanctuary. Norris is a lay preacher in the Presbyterian Church, also an associate in a community of Benedictine monks, as well as an environmentalist and citizen. A very sensitive book, with a marvelous sense of place. (v4,#2)


Norris, Scott, "A Year for Biodiversity," Bioscience 50 (No. 2, Feb 01 2000): 103- . (v.11,#2)

Norris, Scott. A Madagascar Defiant. @ BioScience Vol. 56, no. 12 (2006): 960-65. Conservationists have long proclaimed the economic value of biodiversity and the services it provides. The point may be proved in Madagascar, where a determined president and an
international conservation coalition are struggling to transform a country noted for its past environmental mismanagement into a new role model for green development.


Norse, Elliott A., *Global Marine Biological Diversity: A Strategy for Building Conservation into Decision Making*. Washington, DC: Island Press, 1993. 350 pages. $27.95. Builds on the work of more than 100 expert contributors. What is marine biological diversity and how is it important? How is it similar and different to terrestrial diversity? Life in the sea and ways to save, study, and use that life sustainably. Norse is chief scientist at the Center for Marine Conservation, also attached to the University of Washington. (v4,#2)


Norstrom, Karl F., "The Concept of Intrinsic Value and Depositional Coastal Landforms," *Geographical Review* 80(1990):68-81. Norstrom is a research professor at the Center for Coastal and Environmental Studies at Rutgers University. (v2,#1)

North American Conference on Christianity and Ecology, The. publishes *Firmament: A Quarterly of Christian Ecology* and holds conferences and publishes proceedings and videotapes. It will sponsor some sixty events in 1988 and 1990. The most recent conference proceedings is a book, *Christian Ecology: Building an Environmental Ethic for the Twenty-First Century*, available for $12 plus $3 postage and handling. For information contact Eleanor Rae, President, North American Conference on Christianity and Ecology, P. O. Box 14305, San Francisco, CA 94114-0305. (v1,#1)

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

Northcott recognizes amply that Christians have sometimes been the cause of environmental degradation; but he also believes that the primal Hebrew vision was "earth friendly" (p. 198), and that early Christianity with its understandings of the redemption of creation was also. The Christ is the Lord of nature, as well as of persons. Northcott argues for what he call a "repristination" of such worldviews (p. xiii, p. 239, p. 255). He has a soft spot for indigenous peoples, of whom he paints a rather rosy picture, and thinks that they were closer to the Hebrew mind than often realized. A central emphasis is on natural law, which Northcott hopes to recover. Northcott teaches Christian ethics at the University of Edinburgh. (v8,#3)


Northcott, Michael S., "Do Dolphins Carry the Cross? Biological Moral Realism and Theological Ethics," New Blackfriars (monthly review edited by the English Dominicans) vol. 84, no. 994, December 2003. "Christians who own that dolphins reveal aspects of the cruciform shape of biological and social reality will also wish to shun foods gotten at the expense of the casual destruction of this wondrously rich exemplar of God's created order. ... Dolphins and porpoises, which are so close to humans in many aspects of their flourishing, ... are the victims of this lack of virtue amongst modern fisherfolk." (p. 552). Northcott is in theological ethics, New College, University of Edinburgh.

Northcott, Michael S. The Environment and Christian Ethics. New York: Cambridge University Press, 1996. 280 pages. $59.95 cloth, $21.95 paper. The extent, origins and causes of the environmental crisis. The author claims to provide an important corrective to secular approaches to environmental ethics, including utilitarian individualism, animal rights theories and deep ecology. Northcott is at the University of Edinburgh. (v7, #3)

Northeast Regional Agricultural Engineering Service. A Guide to Logging Aesthetics: Practical Tips for Loggers, Foresters and Landowners. 1993. 27pp. $6 paper. This describes the cost-effective and proven practices that minimize negative impacts during and immediately after harvest, while enhancing other values.


Norton, Bryan and Minteer, Ben A., "From environmental ethics to environmental public policy: Ethicists and economists, 1973-future." Pages 373-407 in Tom Tietenberg and Henk Folmer,eds., The International Yearbook of Environmental and Resource Economics 2002/2003: A Survey of Current Issues (Cheltenham UK: Edward Elgar, 2002). Environmental ethics has developed with a puzzling ambiguity about the nature of the independence that is asserted for natural intrinsic value and about what types of being can have intrinsic value. "Environmental ethicists have made few contributions to actual discussions about what to do to improve the environment" (p. 374) A more community-based, pluralist approach is needed, centering in "communal values", and worked out with democratic processes and deliberative institutions within which environmental values as communal goods may be advanced. Rich opportunities may open up for collaborations between economists and philosophers, as well as collaborations among these, together with cognitive psychologists, to engage in interdisciplinary research on the development and formation of social values in deliberative situations.

"We ... consider a more radical conceptual innovation, the rejection of moral individualism and the recognition that important environmental values may unfold on the communal scale, a scale that cannot be reduced to individual goods. This more radical innovation encourages a
shift in the way we think about environmental values and valuation, shifting attention from on\ntological questions regarding the nature and measurement of values toward a more politically
oriented process approach"(p. 375), specifically C. S. Holling's "adaptive management" (p. 395).

Norton is in philosophy and public policy, Georgia Institute of Technology. Minteer is in
public policy there.

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. (v5,#4)

Norton, Bryan G. "Environmental Ethics and Nonhuman Rights." Environmental Ethics
4(1982):17-36. If environmentalists are to combat effectively the continuing environmental decay
resulting from more and more intense human exploitation of nature, they need a plausible and
coherent rationale for preserving sensitive areas and other species. This need is illustrated by
reference to two examples of controversies concerning large public projects in wilderness
areas. Analyses of costs and benefits to presently existing human beings and the utilitarian
theory which supports such theories are inadequate to provide such a rationale, as other
writers have shown. A number of environmentalists have suggested that ascriptions of rights to
nonhuman animals, plants, and other natural objects may provide the necessary rationale. I
argue that such ascriptions can only be effective if they are supported by a general theory of
rights. Although no such general theory is developed, I state four minimal conditions which must
be fulfilled by all rights holders as entailments of the concept of a right and, hence, as necessary
conditions on rights holding, regardless of the general theory of rights espoused. I then argue
that no appeals to rights of nonhumans can simultaneously fulfill these four minimal conditions
and, on the other hand, satisfy the need for a coherent rationale for environmental preservation.
In the central argument of the essay I exploit the distinction between the concern of vegetarians
and antivivisectionists who rest their case for animal rights on the analogy of animal suffering to
human suffering and the concern of environmentalists to protect the integrity of holistic
ecosystems. I then conclude that even if the case for nonhuman rights can be made
convincingly, the rights defended are insufficient for the development of a complete and
coherent rationale for environmental preservation. Norton is at the Division of Humanities, New
College of the University of South Florida, Sarasota, FL. (EE)

Ethics 4(1982):319-37. Do appeals to rights and/or interests of the members of future
generations provide an adequate basis for an environmental ethic? Assuming that rights and
interests are, semantically, individualistic concepts, I present an argument following Derek Parfit
which shows that a policy of depletion may harm no existing individuals, present or future.
Although this argument has, initially, an air of paradox, I show that the argument has two intuitive
analogues--the problem of generating a morally justified and environmentally sound population
policy and the problem of temporal distance. These problems are shown both to resist solutions
in individualistic terms and to embody difficulties similar to those raised by Parfit. Since
utilitarianism and modern deontology are individualistic in nature, they cannot provide the basis for an adequate environmental ethic and they do not rule out policies such as that of depletion, which is clearly unacceptable environmentally. I close with an exploratory but generally pessimistic assessment of the possibility that rights and interests can be reconstrued as nonindividualistic. Norton is at the Division of Humanities, New College of the University of South Florida, Sarasota, FL. (EE)


Norton, Bryan G., "Economists' Preferences and the Preferences of Economists." Environmental Values 3(1994):311-332. Economists, who adopt the principle of consumer sovereignty treat preferences as unquestioned for the purposes of their analysis. They also represent preferences for future outcomes as having value in the present. It is shown that these two characteristics of neoclassical modelling rest on similar reasoning and are essential to achieve high aggregatability of preferences and values. But the meaning and broader implications of these characteristics vary according to the arguments given to support these methodological choices. The resulting ambiguities raise questions regarding economists' attitudes towards the study of preference formation and reformation. Under a strong, positivist interpretation (which is philosophically problematic), consumer sovereignty represents a rejection of any meaningful study of these subjects; under a weaker, methodological understanding, consumer sovereignty merely draws a boundary between economics and other disciplines. The weaker version is argued to be more defensible, and economists are urged to engage in interdisciplinary work that will clarify how preferences are formed, criticized and reformed. KEYWORDS: Consumer sovereignty, economic explanation, preference formation, preferences, value neutrality. Norton is at the School of Public Policy, Georgia Institute of Technology. (EV)

Norton, Bryan G., "Should Environmentalists Be Organicists?" Topoi (Netherlands) 12(1993):21-30. "Should environmentalists be minimal holists or should they follow their 'spiritual' leader, Muir, in adopting strong, teleological and spiritualistic organicism? First, note that one might consistently say, 'both,' provided the differing interpretations are reconciled as fulfilling different functions. Environmentalists might, in discussing whether to accept a new, less mechanistic worldview let their rhetoric soar with Muir, for example; but they might also, with Leopold, the practitioner who must forge a new management philosophy that will have broad appeal, recognize that such rhetorical flourishes raise issues that lie beyond easy resolution and content themselves with less difficult intellectual entanglements. My concern here is not with rhetoric, but with forging a vocabulary and set of principles of management that are scientifically respectable and adequate to recognize the dynamic and creative processes that maintain and shape natural systems. Given this goal, a minimal holism points a more promising direction for the future of environmental ethics and environmental policy" (pp. 27-28). A minimal holism will recognize nature as a self-organizing system. Norton teaches philosophy and policy at Georgia Tech. (v6,#4)

Norton, Bryan G. "Biodiversity and Environmental Values: In Search of a Universal Earth Ethic," Biodiversity and Conservation 9(no. 8, 2000):1029-1044. Abstract. While biodiversity protection has become a widely accepted goal of environmental protectionists, no such agreement exists regarding why it is important. Two, competing theories of natural value here called "Economism" and "Intrinsic Value Theory" - are often cited to support the goal. Environmentalists, who have recently proposed the articulation of a universal "Earth Charter" to express the shared values humans derive from nature, have cited both of these theories as support for biodiversity protection. Unfortunately, these theories, which are expressed as polar opposites. do not work well together and the question arises: is there a shared value that humans place on nature? It is argued that these two value theories share four questionable assumptions: (1) a sharp distinction between "intrinsic" and "instrumental" value; (2) an entity orientation; (3) moral
monism; and (4) placeless evaluation. If these four assumptions are denied, an alternative value system emerges which recognizes a continuum of ways humans value nature, values processes rather than only entities, is pluralistic, and values biodiversity in place. An alternative theory of value, which emphasizes protecting processes rather than protecting objects, and which values nature for the creativity of its processes, is proposed as a more attractive theory for expressing the universal values of nature that should motivate an Earth Charter and the goal of biodiversity protection. Key words: biodiversity, creativity, social values, value theories.

Norton, Bryan G. "Environmental Ethics and Weak Anthropocentrism." Environmental Ethics 6(1984):131-48. The assumption that environmental ethics must be nonanthropocentric in order to be adequate is mistaken. There are two forms of anthropocentrism, weak and strong, and weak anthropocentrism is adequate to support an environmental ethic. Environmental ethics is, however, distinctive vis-a-vis standard British and American ethical systems because, in order to be adequate, it must be nonindividualistic. Environmental ethics involves decisions on two levels, one kind of which differs from usual decisions affecting individual fairness while the other does not. The latter, called allocational decisions, are not reducible to the former and govern the use of resources across extended time. Weak anthropocentrism provides a basis for criticizing individual, consumptive needs and can provide the basis for adjudicating between these levels, thereby providing an adequate basis for environmental ethics without the questionable ontological commitments made by nonanthropocentrists in attributing intrinsic value to nature. Norton is at the Division of Humanities, New College of the University of South Florida, Sarasota, FL. (EE)

Norton, Bryan G. "Why I am Not a Nonanthropocentrist: Callicott and the Failure of Monistic Inherentism." Environmental Ethics 17(1995):341-358. I contrast two roles for environmental philosophers--"applied philosophy" and "practical philosophy"--and show that the strategy of applied philosophy encourages an axiological and monistic approach to theory building. I argue that the mission of applied philosophy, and the monistic theory defended by J. Baird Callicott, in particular, tends to separate philosophers and their problems from real management issues because applied philosophers and moral monists insist that theoretical exploration occurs independent of, and prior to, applications in particular situations. This separation of theory and practice suggests that philosophers are likely to be effective in policy discussions only to the degree that they can offer unquestioned theories that adjudicate real problems. Callicott offers his monistic, ontological approach as universal guidance to environmental activists and decision makers, arguing that ecosystems and communities are moral subjects that can "own" their own inherent value. Callicott's theory, however, faces a crucial, unanswered theoretical dilemma which illustrates the impossibility of the dual task Callicott has set for his theory "to provide a single, ontological unification of ethics under nonanthropocentric holism and to capture the fine nuances of ethical obligations as experienced in varied communities." I also show that monistic assumptions have led to an unfortunate interpretation of Aldo Leopold's land ethic and that a pluralist and pragmatist direction is likely to provide a more efficacious and theoretically defensible direction for further study of environmental philosophy in a more practical mode. Norton is at the School of Public Policy, Georgia Institute of Technology. (EE)

Norton, Bryan G., Michael Hutchins, Elizabeth F. Stevens, and Terry Maple, eds., Ethics on the Ark: Zoos, Animal Welfare, and Wildlife Conservation. Washington, DC: Smithsonian Institution Press, 1995. 432 pages. $ 32.50 cloth. Values underlying the conservation of nature in captivity. Zoos are not, or should not be, institutions for gawking at caged animals. They have been undergoing a metamorphosis from a menagerie symbolizing human mastery over the beasts to vital sites of ex situ species conservation. But does this self-redefinition morally justify their continued existence? The zoo question pits individualistic animal welfare ethics against holistic environmental ethics, a concern for specimens against a concern for species. Part I. The Future of Zoos. Part II. The Targets of Protection: Genes or Individuals or Populations or Species or
Norton, Bryan G. "Population and Consumption: Environmental Problems as Problems of Scale." *Ethics and the Environment* 5(2000):23-46. ABSTRACT: Almost every time I teach environmental topics to undergraduate students, at least one student confidently states the opinion that environmental problems are most basically caused by human population growth, and that if we could control population growth, that would be the end of the problems. Although I try never to show how appalled I am by ignorance among students—especially when they are volunteering opinions in a process of thinking through problems—I admit that in these cases I must consciously restrain myself from rebuking the student aloud. What is more appalling is that I fear that this belief is shared by many adults in the United States and perhaps throughout the developed world. This woefully oversimplified formula for understanding environmental problems is not just oversimplified, it is also morally dangerous. When used in conjunction with the apparent fact that industrially developed nations are bringing their population growth under control, the reduction of environmental problems to population problems brings about a not-so-subtle shift of responsibility for existing and emerging environmental problems to the less-developed world. In class, I try to shake the students' complacency about their own role, pointing out to them that, if the blame for environmental damage can be located in the act of parenting, they should realize that each American child born (given current consumption patterns) has 40 to 50 times the environmental impact of a child born in poorer nations. Huge proportions of that consumption are made possible by material flows from less-developed nations of the South into the industrialized North. Even when these material flows bring rapid economic growth, as in Indonesia, for example, the environmental and cultural costs are enormous, and it is often the case that only elites benefit from this growth. (E&E)

Norton, Bryan G., "Conservation and Preservation: A Conceptual Rehabilitation," *Environmental Ethics* 8(1986):195-220. A deep analysis of conservation and preservation as theoretical models of environmental policy. Norton is critical of the traditional way (following John Passmore) that conservation is viewed as anthropocentric while preservation is considered non-anthropocentric. The definitions of the policies need not include anthropocentric or non-anthropocentric motivations. Given a long time scale, these two motivations converge; what is good for a whole range of human values is also good for nature itself. (Katz, Bibl # 1)

Norton, Bryan G., *Why Preserve Natural Variety?* Princeton: Princeton University Press, 1987. Pp. xiii, 281. Norton focuses on the problem of justifying policies of species preservation as a paradigm for all environmental issues. The book has four basic parts. First, Norton shows the failure of economic "demand" values as a basis of preservationist policy. Second, he examines the problems in attributing intrinsic value to natural entities and systems. The third section, which is the heart of the book, is a presentation of Norton's theory of "weak anthropocentrism" or "transformative value." Nature preservation is justified because it leads to the fostering of specific values in human life and culture worth preserving. These higher order values are not reducible to any array of demand or preference values, but they are crucial in the development of an ecological world view. In the final section, Norton shows how a concern for transformative value can be translated into specific policy proposals. Norton's argument is a kind of "fall-back" position, a pragmatic recognition that arguments over the intrinsic non-anthropocentric value of nature only delay and obstruct policies of preservation. As such, it is the best expression of a compromise between an economically based resource environmentalism and the more radical biocentric versions of environmental ethics. But advocates of a deeper environmental ethic will be concerned that Norton's "transformative
value" is just a higher order contingent instrumental value designed for the satisfaction of human interests.  (Katz, Bibl # 2) Reviewed in Environmental Ethics 10(1988):275-78.

Norton, Bryan G., "On What We Should Save: The Role 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.  (v5,#4)


Norton, Bryan G., "Environmental Ethics and Weak Anthropocentrism," Environmental Ethics 6(1984):131-148. The third in a series by Norton, all appearing in this journal. Norton contrasts "strong" anthropocentrism--where all value is translated into felt human preferences--with "weak anthropocentrism"--where all value is derived either from felt human preferences or an ideal world view that is the source of preferences (see p. 134). Environmentalism is then justified on the basis of weak anthropocentrism: environmental protection is not based on the dubious ontological commitment to intrinsic value in natural entities, but rather on the continuation of a resource base for ongoing human consciousness. But Norton has to explain why the continuation of human consciousness is a good. He does not even attempt to justify this claim (p. 143). (Katz, Bibl # 1)

Norton, Bryan G. "Convergence and Contextualism: Some Clarifications and a Reply to Steverson." Environmental Ethics 19(1997):87-100. The convergence hypothesis asserts that, if one takes the full range of human values--present and future--into account, one will choose a set of policies that can also be accepted by an advocate of a consistent and reasonable nonanthropocentrism. Brian Steverson has attacked this hypothesis from a surprising direction. He attributes to deep ecologists the position that nonhuman nature has intrinsic value, interprets this position to mean that no species could ever be allowed to go extinct, and proceeds to show that my commitment to contextualism prohibits me from advocating the protection of species universally. In response, I show, by reference to recent scientific findings, how difficult it is to defend species preservation in all situations. In particular, I argue that Steverson's appeal to a possible world in which we have nearly complete biological knowledge misses the point of the convergence hypothesis. It is an empirical hypothesis, with significant indirect, and some direct, evidence to support it. Although it is a falsifiable hypothesis about real-world policies, it cannot be falsified by a contrary-to-fact case. Norton is in the Schol of Public Policy, Georgia Institute of Technology, Atlanta. (EE)


Norton, Bryan G. "Thoreau's Insect Analogies: Or, Why Environmentalists Hate Mainstream Economists." Environmental Ethics 13(1991):235-51. Thoreau believed that we can learn how to live by observing nature, a view that appeals to modern environmentalists. This doctrine is exemplified in Thoreau's use of insect analogies to illustrate how humans, like butterflies, can be transformed from the "larval" stage, which relates to the physical world through consumption, to
a "perfect" state in which consumption is less important, and in which freedom and contemplation are the ends of life. This transformational idea rests upon a theory, of dynamic dualism in which the animal and the spiritual self remain in tension, but in which the "maturity" of the individual--transcendence of economic demands as imposed by society--emerges through personal growth based on observation of nature. Thoreau's dynamic theory of value, and its attractiveness to environmentalists, explains why environmentalists reject the mainstream, neoclassical economic paradigm. This paradigm accepts consumer preferences as "givens" and treats these preferences as the source of all value in their model. Because Thoreau insists that there is value in transformations from one preference set to another, the neoclassical paradigm cannot capture this central value, and cannot account for the environmentalists' emphasis on public "education" to reduce consumptive demands of humans on their environment. Norton is at the School of Public Policy, Georgia Institute of Technology, Atlanta, GA. (EE)

Norton, Bryan G. and Bruce Hannon. "Environmental Values: A Place-Based Theory." Environmental Ethics 19(1997):227-245. Several recent authors have recommended that "sense of place" should become an important concept in our evaluation of environmental policies. In this paper, we explore aspects of this concept, arguing that it may provide the basis for a new, "place-based" approach to environmental values. This approach is based on an empirical hypothesis that place orientation is a feature of all people's experience of their environment. We argue that place orientation requires, in addition to a home perspective, a sense of the space around the home place and that this dual aspect can be modeled using a "hierarchical" methodology. We propose a "triscalar," place-oriented system for the analysis of environmental values, explore the characteristics of place-orientation through several examples, and employ these characteristics to distinguish acceptable and unacceptable aspects of the NIMBY (not-in-my-backyard) idea. Norton is in the School of Public Policy, Georgia Institute of Technology, Atlanta. Hannon is in geography at the University of Illinois, Urbana. (EE)


Norton, Bryan G. and Anne C. Steinemann. "Environmental Values and Adaptive Management," Environmental Values 10(2001):473-506. The trend in environmental management toward more adaptive, community-based, and holistic approaches will require new approaches to environmental valuation. In this paper, we offer a new valuation approach, one that embodies the core principles of adaptive management, which is experimental, multi-scalair, and place-based. In addition, we use hierarchy theory to incorporate spatial and temporal variability of natural systems into a multi-scalair management model. Our approach results in the consideration of multiple values within community-based ecosystem management, rather than an attempt to maximise a single variable such as economic efficiency. We then offer two heuristics - one procedural and one evaluative - to guide a community toward shared goals, and to develop indicators to measure progress toward these goals. We illustrate our approach by application to environmental and developmental decisions in the Southern Appalachians. Keywords: Adaptive management, environmental evaluation, management, multi-criteria analyses, sense of place
values. Bryan G. Norton is at the School of Public Policy, Georgia Institute of Technology, Atlanta, GA. Anne C. Steinemann is in the City Planning Program, Georgia Institute of Technology, Atlanta, GA. 30332-0155 (EV)


Norton, Bryan G. "Pragmatism, Adaptive Management, and Sustainability." Environmental Values 8(1999):451-466. ABSTRACT: The pragmatic conception of truth, anticipated by Henry David Thoreau and developed by C.S. Peirce and subsequent pragmatists, is proposed as a useful analogy for characterising "sustainability". Peirce's definition of "truth" provides an attractive approach to sustainability because (a) it re-focuses discussions of truth and objectivity from a search for "correspondence" to an "external world" (the "conform" approach) to a more forward-looking ("transform") approach; and (b) it emphasises the crucial role of an evolving, questioning community in the conduct of inquiry. Any successful definition of sustainability must share these characteristics with Peircean truth. While Peirce and John Dewey never reconciled their disagreements regarding the nature and task of "inquiry", a pragmatist resolution of their differences is offered, arguing that we need both a logic of management sciences (logica utens) and a logic of pure science (logica docens), which (perhaps among other differences) respond very differently to uncertainty. It is shown that adaptive management - an important approach to environmental management - can be understood as a first approximation of a logica utens for social learning in pursuit of solutions to environmental problems, and it is suggested that a pragmatist, transform approach to inquiry such as Dewey's may provide a way around the "fact-value" gulf. KEYWORDS: Defining sustainability, sustainable communities, pragmatism, adaptive management, truth. Bryan G. Norton, School of Public Policy Georgia Institute of Technology Atlanta, GA 30332, USA (EV)

Norton, Bryan G., Toward Unity Among Environmentalists. New York: Oxford University Press, 1991. Norton wants to unite environmentalists in the common cause of environmental protection and appreciation, even though the many environmentalists and environmental groups may have multiple and varied value systems. Despite diverging worldviews, there can be converging policies (the title of a concluding chapter). There are historical chapter studies of Muir, Pinchot, and Leopold, and issue chapters: growth, pollution, biodiversity, and land use, illustrating this thesis. Norton is professor of philosophy at the Georgia Institute of Technology. (v3,#1) Reviewed in Environmental Ethics 14(1992):283-87.

Norton Bryan G., "Biodiversity and environmental values: In search of a universal earth ethic," Biology and Conservation 9(2000):1029-1044. Abstract. While biodiversity protection has become a widely accepted goal of environmental protectionists, no such agreement exists regarding why it is important. Two, competing theories of natural value - here called 'Economism' and 'Intrinsic Value Theory' - are often cited to support the goal. Environmentalists, who have recently proposed the articulation of a universal 'Earth Charter' to express the shared values humans derive from nature, have cited both of these theories as support for biodiversity protection. Unfortunately these theories, which, are expressed as polar opposites, do not work well together and the question arises: Is there a shared value that humans place on nature? It is argued that these two value theories share four questionable assumptions: (1) a sharp
distinction between 'intrinsic' and 'instrumental' value; (2) an entity orientation; (3) moral monism; and (4) placeless evaluation. If these four assumptions are denied, an alternative value system emerges which recognizes a continuum of ways humans value nature, values processes rather than only entities, is pluralistic, and values biodiversity in place. An alternative theory of value, which emphasizes protecting processes rather than protecting objects, and which values nature for the creativity of its processes, is proposed as a more attractive theory for expressing the universal values of nature that should motivate an Earth Charter and the goal of biodiversity protection. Key words: biodiversity, creativity, social values, value theories. Norton is in the School of Public Policy, Georgia Institute of Technology, Atlanta, GA. (v.13,#1)

Norton, Bryan G., "Change, Constancy, and Creativity: The New Ecology and Some Old Problems," Duke Environmental Law and Policy Forum 7(1996):49-70. "How are we to conceptualize the rich mix of change and constancy that we encounter in the world of experience?" "The New Ecology emphasizes change and dynamism in ecological systems, claiming that ecology has under-emphasized these features of natural systems. ... (T)he readiness of ecologists to embrace equilibrium theories and to find constancy in ecology events may have deep--perhaps even nonrational--sources. Equilibrium theories may not be empirical theories at all, but rather may represent pre-theoretical assumptions, which are perhaps rooted in a deep, psychological need for stability in the face of threatening changes. ... The intellectual question then becomes one of how to characterize stability and how to reconcile it with the empirically obvious change we experience everywhere. ... Old Ecologists over-emphasized grand and speculative theory while New Ecologists pay less attention to general principles of ecosystem organization and study particular, local ecological interactions and their outcomes. ... (But) New Ecologists, acting in reaction to the prior over-emphasis on the grand theory of stability in ecological systems, sometimes over-emphasize the importance of change in ecological systems. ... It is not a good idea to pose the question of change versus stability in nature as if there may be an all-or-nothing answer, as if it might turn out that the world is either entirely changing or entirely stable. ... The truth surely is somewhere in between" (pp. 49-55, passim). Norton is in philosophy and public policy at the Georgia Institute of Technology. (v.10,#3)

Norton, Bryan, "Sustainability, Human Welfare, and Ecosystem Health." Environmental Values Vol.1 No.2(1992):97-112. ABSTRACT: Two types of sustainability definitions are contrasted. "Social scientific" definitions, such as that of the Brundtland Commission, treat sustainability as a relationship between present and future welfare of persons. These definitions differ from "ecological" ones which explicitly require protection of ecological processes as a condition on sustainability. "Scientific contextualism" does not follow mainstream economists in their efforts to express all effects as interchangeable units of individual welfare; it rather strives to express sensitivity to different types and scales of impacts that present activities can exert on the future. We can therefore express the moral obligation to act sustainably as an obligation to protect the natural processes that form the context of human life and culture, emphasizing those large biotic and abiotic systems essential to human life, health, and flourishing culture. Ecosystems, which are understood as dynamic, self-organizing systems humans have evolved within, must remain "healthy" if humans are to thrive. The ecological approach to sustainability therefore sets the protection of dynamic, creative systems in nature as its primary goal. KEYWORDS: Sustainability, ecological management, obligations to future, welfare, intergenerational equity, irreversibility. School of Public Policy, Georgia Institute of Technology, Atlanta, GA 33032, USA.

Norton, Bryan G. "Conservation and Preservation: A Conceptual Rehabilitation." Environmental Ethics 8(1986):195-220. Philosophers have paid little attention to the distinction between conservation and preservation, apparently because they have accepted John Passmore's suggestion that conservationism is an expression of anthropocentric motives and that "true" preservationism is an expression of nonanthropocentric motives. Philosophers have therefore concentrated their efforts on this distinction in motives. This reduction, however, is insensitive to
important nuances of environmentalist objectives: there are a wide variety of human reasons for preserving natural ecosystems and wild species. Preservationist policies represent a concern to protect biological diversity from the simplifying effects of human management and are motivated by the full range of values (consumptive, aesthetic, scientific, and moral) attached to a diverse biota. Conservationists and preservationists differ mainly in their emphasis on resilience measures versus predictability measures of stability, respectively. The distinction between anthropocentric and nonanthropocentric motives loses importance as emphasis is placed on the longest term values humans place on the protection of biological diversity. Norton is at the Division of Humanities, New College of the University of South Florida, Sarasota, FL. (EE)


Norton, Bryan G., ed., The Preservation of Species: The Value of Biological Diversity. Princeton: Princeton University Press, 1986. Pp. xi, 305. A collection of essays written under the auspices of the Center for Philosophy and Public Policy, University of Maryland. An important interdisciplinary collection focused on one of the central problems in environmental ethics: why preserve endangered species? Part I contains articles by Thomas E. Lovejoy, Geerat J. Vermeij, and Stephen R. Kellert which investigate the scientific and social nature of the extinction problem. Part III contains articles by Lawrence B. Slobodkin, Terry L. Leitzell, and Robert L. Carlton that examine concrete management decisions regarding species preservation. The essays in Part II are of the most philosophical interest, for they deal with the ethical justification of species preservation. An economist, Alan Randall, "Human Preferences, Economics, and the Preservation of Species," (pp. 79-109), analyzes species preservation as a problem in resource allocation. Unlike many economic approaches, Randall is sensitive to many different kinds of human preferences and values that might lead to preservation decisions. Bryan Norton, "On the Inherent Danger of Undervaluing Species," (pp. 110-137), argues that the instrumental reasons for valuing a particular species transcend its inherent properties: there are instrumental reasons for preserving any species in an ecosystem. The diversity of the biosphere is a good that ought to be preserved; thus questions of the extinction of a particular species are not really isolated decisions. J. Baird Callicott, "On the Intrinsic Value of Nonhuman Species," (pp. 138-172), surveys several axiologies that could lend support to the value of nonhuman entities, and decides that the only legitimate basis for an environmental ethic is a kind of Humean/ Darwinian theory based on "bio-empathy." Eliot Sober, "Philosophical Problems for Environmentalism," (pp. 173-194), criticizing a number of rationales for the intrinsic value of natural entities and species, and then offers an argument based on aesthetic properties: nature, like art, should not be destroyed because of our interest in the beautiful--"But it is unclear, then, why we preserve ugly species or ecosystems." Donald Regan, "Duties of Preservation," (pp. 195-220), presents an argument that owes much to G. E. Moore. Regan wants to base the preservation of natural entities on a notion of intrinsic value, but he wants to deny that intrinsic value exists outside of consciousness. His solution is to claim that what has intrinsic value are certain "complexes": a natural entity, a conscious valuer's knowledge of the entity, plus a conscious evaluator's pleasure in that knowledge. Being obligated to preserve such complexes would lead derivatively to preserving natural entities.--"A provocative idea, but clearly based on a major ontological commitment." Bibliography. (Katz, Bibl # 1) Reviewed in Environmental Ethics 10(1988):91-94.

Norton, Bryan. Searching for Sustainability: Interdisciplinary Essays in the Philosophy of Conservation Biology. New York: Cambridge University Press, 2003. 27 of Norton's essays, some with co-authors. Philosophical and environmental pragmatism. Environmental policy with an eye toward sustainability. If we properly treat human values and concerns for future generations, including our desire for their opportunities, then we arrive at policies that are essentially identical to those advocated by defenders of intrinsic value in nature (Norton's "convergence hypothesis"). Adaptive environmental management and hierarchy theory (smaller
more dynamic ecosystems are embedded within larger, more stable systems). Conservation biologists should see themselves as engaged in a normative science. (v. 15, # 3)

Norton, Bryan. "Objectivity, Intrinsicality and Sustainability: Comment on Nelson's Health and Disease as 'Thick' Concepts in Ecosystemic Contexts." Environmental Values 4(1995):323-332. Ecosystem health, as James Nelson argues, must be understood as having both descriptive and normative content; it is in this sense a 'morally thick' concept. The health analogy refers (a) at the similarities between conservation ecology and medicine or plant pathology as normative sciences, and (b) to the ability of ecosystems to 'heal' themselves in the face of disturbances. Nelson, however, goes beyond these two aspects and argues that judgements of illness in ecosystems only support moral obligations to protect them if they are attributed a `good of their own'. But this latter extension of the analogy flies in the face of ecological science, which has been forced to abandon organicism. If one separates the question of the warranted assertibility of environmentalists' goals from the question of where values in nature are located, the search for an objective realm of value realism can be seen to be unnecessary. KEYWORDS: Ecosystem health, intrinsic value, objectivity, organicism. Norton is in the School of Public Policy, Georgia Institute of Technology. (EV)

Norton, Tony W., and Stephen R. Dovers, eds. Ecology and Sustainability of Southern Temperate Ecosystems. Canberra, CSIRO (Commonwealth Scientific and Research Organization), 1994, 133 pages. Australia's southern temperate forest ecosystems, the science and management of their conservation. (v8,#2)


Norton, Bryan G. "Politics and Epistemology: Inclusion and Controversy in Adaptive Management Processes." Environmental Ethics 29(2007):299-306. Kevin Elliott has argued that I defend two Aconceptions@ of adaptive management processes in my book, Sustainability: A Philosophy of Adaptive Ecosystem Management, calling the conceptions Apolitical@ and Ametaphysical,@ respectively. Elliott claims that I must choose between them. Elliott has not sufficiently explained how he proceeds from the claim that I provide two separable arguments for my adaptive management process to his conclusion that I have two conceptions of this process. Once this confusion is clarified, it becomes clear that adapting a pragmatist grounding for the process (which Elliott refers to as my Ametaphysical@ conception) is compatible with an open and inclusionary process. Pragmatism, in other words, does not exclude those who adopt ideological approaches to value from the adaptive process; it merely urges them, once in the process, to propose testable hypotheses rather than resort to ideological rhetoric. (EE)


Norton, Bryan G., A Reply to My Critics, Journal of Agricultural and Environmental Ethics 20(2007):387-405. Critics of my book, Sustainability, have raised many objections which are addressed. In general, I emphasize that the book is an integrative work; it must be long and complex because it attempts a comprehensive treatment of problems of communication, of evaluation, and of management action in environmental discourse. I explain that I depend upon the pragmatists and on work in the pragmatics of language because the current language of environmental policy discourse is inadequate to allow deliberative processes that can reach consensus and cooperative actions. I revise my account of risk analysis somewhat, and defend my broad approach to the concept of sustainability. Finally, I discuss applications of my book to the current situation in environmental policy discourse. Norton is School of Public Policy, Georgia Institute of Technology, Atlanta, GA.
Norton, Bryan G. *Sustainability: A Philosophy of Adaptive Ecosystem Management*. Chicago: University of Chicago Press, 2005. Beginning with his experiences as a philosopher working at the Environmental Protection Agency, Norton argues that the central problem of environmentalism and environmental protection is a lack of effective communication. Following his interpretation of Aldo Leopold as an anthropocentric holist, environmental pragmatist, and adaptive manager, Norton critiques both environmental economics and intrinsic value approaches to environmental ethics and, in their place, develops a theory of environmental values as community commitments and a normative vocabulary that will encourage interdisciplinary communication and social learning about environmental problems. Norton’s adaptive ecosystem management is an American pragmatist-inspired account of experience, truth, and language motivated by the social values of democratic communities. He defines sustainability as a relationship between generations such that the earlier generations fulfill their individual wants and needs so as not to destroy, or close off, important and valued options for future generations (p. 363).

Environmental philosophers should no longer articulate values but instead should only offer heuristics and linguistic choices to help improve communication among the stakeholders of democratic communities. The field of environmental ethics becomes a subfield of adaptive management science.

Norton argues on pragmatic Deweyan grounds that we should cease to ask scientists for value neutral definitions of sustainability developed independently of moral and social values, to guide our environmental policy making debates. Sustainability, like human health, is a normative concept from the start - one that cannot be meaningfully developed by scientists or economists without input by all the stakeholders affected. While I endorse Norton’s approach, I question his apparent presumption that concern for sustainability for the future is at odds with and ought to trump concern for enhancement in the present of public opportunities to access the goods nature represents. I argue that the two are not separable in practice. I argue for Passmore’s position that unless we take care to enhance equitable access to the good and services nature represents in the present, we cannot succeed in promoting sustainability for future generations. Welchman is Department of Philosophy, University of Alberta, Edmonton, AB, Canada.


Noss, Reed F. "What Should Endangered Ecosystems Mean to The Wildlands Project?" *Wild Earth* 5, no. 4 (Winter 1995): 20- . (v6,#4)

Noss, Reed F. "Conservation or Convenience?" *Conservation Biology* 10, no.4 (1996): 921. (v7, #3)


Noss, Reed F. "Conservation Biology, Values, and Advocacy." *Conservation Biology* 10, no.3 (1996): 904. (v7, #3)


Noss, Reed. "Soul of the Wilderness: Biodiversity, Ecological Integrity, and Wilderness." *International Journal of Wilderness* 2, no. 2 (August 1996): 5-8. Wilderness, and natural areas in general, should be evaluated primarily in terms of their contribution to the broad goals of
protecting and restoring native biodiversity and ecological integrity. Noss is the editor of *Conservation Biology*. (v7, #3)

Noss, Reed. "Equal Rights for Parasites." *Conservation Biology* 9 (no. 1, 1995): 1-2. "Parasites and their hosts evolved--better, co-evolved--together. They really do deserve each other. Parasites are part of our biosphere and, we, as biologists, must accord them the same respect we exhibit for their hosts. If we truly appreciate biological diversity, we must advocate that all species are precious, even parasites." Another good editorial for classroom discussion. Noss is editor of Conservation Biology. (v6,#1)


Noss, Reed F. A Values Are a Good Thing in Conservation Biology.@ *Conservation Biology* Vol. 21, no. 1 (2007): 18-20. The way to win respect and influence for science in society is to boldly proclaim its most compelling values: commitment to truth, rationality, full consideration of evidence, self-correction, openness, and critical discourse. Underlying all these concerns about credibility, there is something more fundamental that should concern us: the intrinsic value of nonhuman beings - the voiceless, non-voting creatures for whom biologists are best equipped to speak.@


Nováková, Jana, "Retreat of Halophytes in the Czech Republic: Agricultural, Mining, and Urbanization Effects [The Case of Dentated Melilot--Melilotus dentata (Fabaceae)]," *Journal of Agricultural and Environmental Ethics* 10(1997):69-78. As a result of expanding human pressures, the heterogeneity of a formerly diverse landscape has been reduced and the richness of animal and plant species has deceased. Some particular stand types and their species are especially connected with impoverishment caused by man's activates. Halophyte Dentated Melilot (Melilotus dentata) is one of such species, which is vanishing apparently as a result of intensive agriculture, surface mining, and urbanization. The data on its distribution were compiled from herbarium specimens, literature, and the author's own field observations. (JAEE)


Nowak, Martin A. and Karl Sigmund, "Evolution of Indirect Reciprocity," *Nature* 437(27 October 2005):1291-1298. Natural selection is typically assumed to favor selfishness. But many biological systems, and especially human societies, are organized around altruistic, cooperative interactions. This seems to evolve through indirect reciprocity: I help you and somebody else helps me. This leads to reputation building, morality judgment and complex social interactions with ever-increasing cognitive demands. Nowak is in biology and mathematics, Harvard University. Sigmund is in mathematics, University of Vienna.
Nozick, Robert, *The Examined Life* (New York: Simon and Schuster, 1989). "Something has intrinsic value, I suggest, to the degree that it is organically unified. Its organic unity is its value. ... The common structure of value across different areas, and the major dimension that underlies almost all value, is the degree of organic unity. Given this, we can understand why we hold other particular things to be valuable in themselves—for example, whole ecological systems with their complexly interrelated equilibria." (p. 164) Nozick also finds organic unity in works of art. Nozick is in philosophy, Harvard University. (v1,#2)


Nunez, Theodore W., "Rolston, Lonergan, and the Intrinsic Value of Nature," *Journal of Religious Ethics* 27 (no. 1, Spring, 1999):105-128. In recent metaethical debate over ways to justify the notion of intrinsic natural value, some neopragmatists have challenged realist conceptions of scientific and moral truth. Holmes Rolston defends a critical-realism epistemology as the basis for a metaphysics of "projective nature" and a cosmological narrative--both of which set up a historical ontology of objective natural value. Pure ecological science informs the wilderness experience of Rolston's ideal epistemic subject, the "sensitive naturalist." Nunez argues that Rolston's account of the relation between knowing and valuing can be clarified and strengthened by appropriating Bernard Lonergan's transcendental method. Conversely, Lonergan's view of moral self-transcendence can be developed further in light of Rolston's virtue epistemology, which is embodied in the figure of the sensitive naturalist. Key words: critical realism, environmental ethics, epistemology, intrinsic value, value theory.

The commentaries are:

--Frankenberry, Nancy, "On Empty Compliments and Deceptive Detours: A Neopragmatist Response to Theodore W. Nunez," *Journal of Religious Ethics* 27 (no. 1, Spring, 1999):129-136. Neopragmatist reasons for repudiating metaphysical realism's notions of intrinsicality and subject-independent reality. Following the holism of Donald Davidson and Richard Rorty rather than the epistemological premises of Holmes Rolston and Bernard Lonergan, coping with the ecological crisis does not require conjuring up an epistemic crisis. Environmental ethics in neopragmatist hands would seek procedures for bringing about agreement in improving our practices, not our epistemology. Frankenberry is in religion at Dartmouth College, Hanover, NH.

--Jackson, Timothy P., "Ambivalences about Nature and Naturalism," *Journal of Religious Ethics* 27 (no. 1, Spring, 1999):137-144. A "die-hard supernaturalist," someone "at two with nature" who would be "at one with God" has mixed feelings about Theodore Nunez's defense of naturalism. Unlike neopragmatists, Jackson is not troubled by Nunez general realism about value; he takes exception not to Nunez theoretical account of truth, but to his specific axiology. Jackson does not share Nunez's confidence that Rolston's "projective nature" can provide reliable moral inspiration. Instead such inspiration can arise only from the holiness of God. Jackson teaches ethics at Candler School of Theology, Emory University, Atlanta.


Part I. An interpretive analysis of Rolston's major writings. His meta-ethical positions in the areas of epistemology, metaphysics, axiology, and philosophical anthropology. Rolston's interpretive natural history and its relation to his theology of nature. Rolston defends a critical-realist epistemology as the meta-ethical basis for a science-based, ecocentric ethic. His most important epistemological claim is that human beings are capable of worldview-formation, moral oversight, and planetary altruism.

Part II. Aspects of Lonergan's philosophy relevant to environmental ethics: cognitional theory, transcendental method, and critical-realist epistemology. Cognitive and moral objectivity is the fruit of authentic subjectivity. Lonergan's theory of emergent probability and the related notions of development and finality. Lonergan's dialectic of progress, decline, and redemption in history and society. Lonergan's view of the humanity-nature relationship clarified and developed by drawing on Robert Doran's related notions of an ecological differentiation of consciousness, an integral dialectic of culture, and psychic conversion.

Part III. In a mutually critical dialogue between Rolston and Lonergan on foundational issues in environmental ethics, each thinker complements and corrects the other in several ways. (1) Critical realism offers the most adequate epistemological grounding for environmental ethics. (2) Meeting the eco-social crisis requires a new, nonanthropocentric ethic that is scientifically informed and religiously based (a theocentric ethic). (3) It is both necessary and possible for a new environmental ethic to integrate a nonanthropocentric theory of values in nature with a humanistic value theory. (4) A new ethic must include, as a central component, a character ethic informed by an evolutionary epic and a normative vision of sensitive earth residence.

A summary argument, with commentaries, appears as "Rolston, Lonergan, and the Intrinsic Value of Nature," Journal of Religious Ethics 27 (no. 1, Spring, 1999):105-128. See that entry. (v.10,#2)

Nunez is now teaching ethics, including environmental ethics, at Villanova University. Available from UMI Disseration Services, 300 North Zeeb Road, P. O. Box 1346, Ann Arbor, MI 48106-1346. Phones: 800-521-0600; 734-761-4700. http://www.bellhowell.infolearning.com Or: www.umi.com (v.10,#3)


Nunez, Theodore W., "Can a Christian Environmental Ethic Go Wild? Evaluating Ecotheological Responses in the Wilderness Debate," pages 329-349 in Kelsay, John and Twiss, Sumner B., eds., The Annual of the Society of Christian Ethics 2000, vol. 20. (Washington, DC: Georgetown University Press, 2000). Postmodern ecophilosophers argue that the wilderness idea, specifically the Euro-American conception of pristine nature derived from Muir and inscribed in the 1964 Wilderness Act, is ethnocentric, elitist, androcentric, and unjust. Although the value of existing wilderness areas is not questioned, the background assumptions and policy implications of the received wilderness concept are. This essay first reviews several postmodern critiques of and alternatives to the wilderness idea, and then examines the responses of two leading ecotheologians, Larry Rasmussen and Sallie McFague, to postmodern themes in contemporary ecophilosophy. It concludes by outlining what it might mean for a Christian environmental ethic to go wild. Nunez teaches ethics at Villanova University. (EE v.12,#1)


inscribed in the 1964 Wilderness Act, is ethnocentric, elitist, androcentric, and unjust. The value of existing wilderness areas is not questioned, but rather the background assumptions and policy implications of the received wilderness concept. This essay first reviews several postmodern critiques of and alternatives to the wilderness idea, and then examines the responses of two leading ecotheologians, Larry Rasmussen and Sallie McFague, to postmodern themes in contemporary ecophilosophy. I conclude by outlining what it might mean for a Christian environmental ethic (in Holmes Rolston's phrase) to "go wild." Nunez is in ethics at Villanova University. (v.11,#4)


Nurden, Robert, "Baka Beyond," The Ecologist 31(no.4, 2001 May 01): 54-. Robert Nurden shows how central Africa's Baka pygmies are suffering both from 'development' and from well-meaning attempts to help them. (v.12,#3)


Nussbaum, Martha C., Women and Human Development: The Capabilities Approach. New York: Cambridge University Press, 2000. How we should understand the quality of life in a nation, and the basic minimum that all governments should provide for their citizens. Calls for a new international focus for feminism and claims that philosophical arguments about justice really do connect with the practical concerns of public policy. Nussbaum is at the University of Chicago. (v.12,#4)


Nye, David E. Consuming Power: A Social History of American Energies. Cambridge, MA: MIT Press. 1997, 300 pp. $25. Nye uses energy as a touchstone to examine the lives of ordinary people engaged in normal activities. He looks at how these activities changed as new energy systems were constructed, from colonial times to recent years. He shows how as Americans incorporated new machines and processes into their lives, they became ensnared in power systems that were not easily changed and resulted in a consumer culture. (v.9,#4)


Nygren, Anja, "Environment as Discourse: Searching for Sustainable Development," Environmental Values 7(1998): 201-222. This study analyses the social and political discourses related to environment and sustainable development in Costa Rica. The central interest is on those development institutions and ideologies that promote social interventions in the name of sustainable development, and on those social processes and economic relations on which the
discursive formation of environment and sustainability is articulated. Four different kinds of ideologies of environmental sustainability are analysed: Environmentalism for Nature, Environmentalism for Profit, Environmentalism for the People, and Alternative Environmentalism. The study highlights the complexity of political discourses that construct the relationship between nature and society, and the multiplicity of the means by which the control over natural resources, within the internally differentiated development apparatus, is defined. KEYWORDS: sustainable development, environmentalism, Costa Rica, access over resources. Anja Nygren is at the University of Helsinki, Finland. (EV)

Nygren, Anja, "Representations of Tropical Forests and Tropical Forest-Dwellers in Travel Accounts of National Geographic," Environmental Values 15(2006): 479-504. As one of the most widely read genres of literature, travel writing plays a crucial role in forming popular images and understandings of foreign places and foreign peoples. This essay examines the dominant images of rainforests and rainforest peoples portrayed in accounts of travels in tropical America published in National Geographic. Special attention is paid to the issues of how particular representations are privileged in this magazine’s travel accounts and how these representations relate to questions of authority and power. The analysis shows that the prevailing representations of the tropical forests and tropical forest-dwellers in the travel accounts of National Geographic rely on historically changing, but equally categorical distinctions between ‘good’ and ‘bad’, and ‘natural’ and ‘unnatural’. (EV)


Nylund, Are, Arne Selvik, Gunnar Skirbekk, Andreas Steigen, and Audfinn Tjonneland, The Commercial Ark: A Book on Evolution, Ecology, and Ethics. Oslo: Scandinavian University Press, 1992; distributed elsewhere by Oxford University Press. (In English) Hardcover. 150 pages. ISBN 82-00-21602-0. A project of the Norwegian Academy of Arts and Sciences. A modern fable about the survival of life on earth, with the basic idea of the earth as our common ark. Sometimes lighthearted and amusing, always with a serious purpose. Dealing with such topics as ecology, economy, and ethics, the authors introduce the Commercial Ark, her crew, her passengers, and what happened to them. There can be no doubt, should the Great Flood threaten us today, things would be handled quite differently than in old Noah’s time. "Our Commercial Ark is still afloat. It remains our only home in a silent universe, as it is the only home, oikos, of all other species, our common oiko-sphere. Should it end like a ship of fools? Or should it become an oiko-logical ark? To this question there is no answer in Holy Scripture. The answer lies in our hands" (p. 148). (Norway)