See the README file that accompanies this bibliography.

This bibliography contains ISEE Newsletter entries, vols. 1-19, 1990-2008, but not 2009 Newsletter entries. They will be merged into this document spring 2010. They can meanwhile be searched in the separate quarterly newsletters at the ISEE website.


1992 Plant Conservation Directory. Center for Plant Conservation, Missouri Botanical Garden, P. O. Box 299, St. Louis, MO 63166. 100 pages. Over 500 professionals and offices involved in conserving U. S. native plants. Rare plant laws by state. Sources for obtaining state lists of rare and endangered plants. (v3,#2)


Aaltola, Elisa, "Other Animal Ethics and the Demand for Difference," Environmental Values 11(2002):193-209. Traditionally animal ethics has criticized the anthropocentric worldview according to which humans differ categorically from the rest of the nature in some morally relevant way. It has claimed that even though there are differences, there are also crucial similarities between humans and animals that make it impossible to draw a categorical distinction between humans who are morally valuable and animals which are not. This argument, according to which animals and humans share common characteristics that lead to moral value, is at the heart of animal ethics. Lately the emphasis on similarity has been under attack. It has been claimed that the search for similarity is itself part of anthropocentric morality, since only those like us are valuable. It also has been claimed that true respect for animals comes from recognizing their difference and "otherness", not from seeing similarities. This paper analyses the new "other animal ethics" by critically examining its basis and consequences. The conclusion is that despite the fact that other animal ethics is right in demanding respect also for difference, it remains both vague and contradictory in its theoretical basis, and leads to undesirable consequences from the perspective of animal welfare. (EV)


Western assumption is that animals cannot be persons. Even in animal ethics, the concept of personhood is often avoided. At the same time, many in cognitive ethology argue that animals do have minds, and that animal ethics presents convincing arguments supporting the individual value of animals. Although animal personhood may seem to be an absurd notion, more attention needs to be placed on the reasons why animals can or cannot be included in the category of persons. Of three different approaches to personhood, the perfectionist approach, the humanistic approach, and the interactive approach, the third approach is the strongest. Personhood defined via interaction opens new doors for animal ethics. (EE)

Aaltola, Eliza, "Animal Ethics and Interest Conflicts," *Ethics and the Environment* 10(no. 1, 2005):19-48. Animal ethics has presented convincing arguments for the individual value of animals. Animals are not only valuable instrumentally or indirectly, but in themselves. Less has been written about interest conflicts between humans and other animals, and the use of animals in practice. The motive of this paper is to analyze different approaches to interest conflicts. It concentrates on six models, which are the rights model, the interest model, the mental complexity model, the special relations model, the multi-criteria model, and the contextual model. Of these, the contextual model is the strongest, and carries clear consequences for the practical use of animals. Aaltola is a researcher in philosophy, Turku University, Finland. (Eth&Env)


Abaidoo, Samuel, Human-Nature Interaction and the Modern Agricultural Regime: Agricultural Practices and Environmental Ethics, 1997, University of Saskatchewan (Canada), Ph.D. thesis in sociology. 305 pages. The relationship between farming practices and two predominant ontological assumptions: (1) the "externality" assumption: humans interact with nature but are only externally related to nature; and (2) the "internality" assumption: humans are internally related to nature. The theoretical orientation is Habermas' neo-modernity thesis, which argues that changes in social normative structures and actions can, and do develop, without changes in ontological assumptions about human-nature relationship. The Habermasian approach rejects the reenchantment thesis espoused by constructive postmodernists. One aspect of the study involved archival research of Canadian agricultural policy; another was a survey of farm families living in the south western Saskatchewan section of the Palliser Triangle. There is a moderate to strong relationship between the "internality" assumption and alternative farming practices. The "externality" assumption was more predominant among conventional farmers. Nevertheless there is only partial support for the Habermasian thesis. A significant minority of alternative farmers espouse environmentalist ethics and also an "externality" ontological assumption. The advisor was H. Dickinson. (v.10,#1)

Abakerli, Stefania, "A Critique of Development and Conservation Policies in Environmentally Sensitive Regions in Brazil," *Geoforum* (Pergamon): 32(2001):551-565. The current model of protected areas originated in the capitalist U.S., with development on most of the landscape but some protected areas. This has been unsuitably exported to Brazil as a "politically viable rationale." Such protected areas have been implemented by a top-down authority, with no serious attention to the ways in which local peoples' livelihoods were connected with the designated reserves. In English, but the English needs considerable copy-editing. Abakerli lives


Abbey, Ruth, A Rawlsian Resources for Animal Ethics, *Ethics and the Environment* 12(no. 1, 2007):1-22. This article considers what contribution the work of John Rawls can make to questions about animal ethics. It argues that there are more normative resources in A Theory of Justice for just animal welfare than some of Rawls' critics acknowledge. However, the move from A Theory of Justice to Political Liberalism sees a depletion of normative resources in Rawlsian thought for addressing animal ethics. The article concludes by endorsing the implication of A Theory of Justice that we look for ways other than rights discourse to respect and protect the well-being of animals. Abbey is at the University of Notre Dame.

Abbot, Ian, "Improving The Conservation Of Threatened And Rare Mammal Species Through Translocation to Islands: Case Study Western Australia," *Biological Conservation* 93 (No. 2, 2000): 195- . (v.11,#2)


Abel, Donald C. *Discourses*. Customized environmental ethics anthology, under construction. McGraw-Hill has developed an electronic database publication system, called Primis, that enables instructors to create customized anthologies for their courses. Instructors can construct their text and order a free sample copy over the Internet, using the Primis web page: http://mhhhe.com/primis. The philosophy section is called Discourses, currently with 127 readings. A further set is under construction on environmental ethics. See web page: http://mhhhe.com/primis/philo. For further information also contact: Donald C. Abel, Philosophy Department, St. Norbert College, 100 Grant St., De Pere, WI 54115. E-mail: abeldc@mail.snc.edu. Phone: 920/403-3086. Fax: 920/403-4086. (v10,#4)


Abelson, Raziel, and Friquenon, Marie-Louise, eds., *Ethics for Modern Life*, 5th edition. New York: St. Martin's Press, 1995. 496 pages. Chapter 8 is Environmental Ethics, with two articles: Jan Narveson, "Moral Problems of Population," and Derek Parfit, "On Doing the Best for our Children." Rather strange choices, if there are to be only two articles representing environmental ethics. The editors do not seem to be able to distinguish between environmental ethics and intergenerational ethics. The two 5th edition articles replace Ruth Macklin, "Can Future Generations Correctly be Said to Have Rights?" and Joel Feinberg, "The Rights of Animals and Unborn Generations" in the 4th edition (newsletter v2, #4). Chapter 11 is on animal rights: Peter Singer, "Animal Liberation," and Ruth Cigman, "No Need for Liberation." The suggested reading list is quite inadequate for environmental ethics, mentioning not a single one of the systematic works in the field, and but two of some sixteen anthologies. Abelson is at New York University; Friquegnon at William Patterson College. (v5,#4)

Aber, J; Neilson, RP; McNulty, S; Lenihan, JM, Bachelet, D; Drapek, RJ, "Forest Processes and Global Environmental Change: Predicting the Effects of Individual and Multiple Stressors," *Bioscience* 51(no. 9, 2001):735-752. (v.13,#1)


Abouchar, Juli A. "A Foot in the Door," *Alternatives* 23 (no.2, 1997): 28. Transnational corporations have always had access to international levers of power. Environmental groups are just now gaining some legal recognition and access. (v8,#2)


Abram, David, "The Ecology of Magic," *Orion Nature Quarterly*, summer 1991. "The traditional shaman ... is in many ways the 'ecologist' of a tribal society. He or she acts as intermediary between the human community and the larger ecological field, regulating the flow of nourishment, not just from the landscape to the human inhabitants, but from the human community back to the local earth. By his or her constant rituals, trances, ecstacies, and 'journeys' the shaman ensures that the relation between human society and the larger society of beings is balanced and reciprocal, and that the village never takes more from the living land than
it returns." "Sadly, our society's relation to the living biosphere can in no way be considered a reciprocal or balanced one. ... From an animistic perspective, the clearest source of all this distress, both physical and psychological, lies in the ... violence perpetrated by our civilization; only by alleviating the latter will we be able to heal the former. ... We are human only in contact and conviviality with what is not human. Only in reciprocity with what is Other will we begin to heal ourselves." (v2,#4)


Abram, David, "Merleau-Ponty and the Voice of the Earth," *Environmental Ethics* 10(1988):101-120. An important analysis of Merleau-Ponty, showing his relevance to environmental ethics and deep ecology. "[T]he hidden thrust of the phenomenological movement is the reflective rediscovery of our inherence in the body of the Earth" (p. 106). Thus his "work suggests a rigorous way to approach and to speak of the myriad ecosystems without positing our immediate selves outside of them" (p. 119). (Katz, Bibl # 2)


Abram, David. "Merleau-Ponty and the Voice of the Earth." *Environmental Ethics* 10(1988):101-20. Ecologists and environmental theorists have paid little attention to our direct, sensory experience of the enveloping world. In this paper I discuss the importance of such experience for ecological philosophy. Merleau-Ponty's careful phenomenology of perceptual experience shows perception to be an inherently creative, participatory activity--a sort of conversation, carried on underneath our spoken discourse, between the living body and its world. His later work discloses the character of language itself as a medium born of the body's participation with a world experienced as alive. That living world is none other than the Earth. Abram is in the department of philosophy, State University of New York at Stony Brook, Stony Brook, NY. (EE)

Abram, David. *The Spell of the Sensuous: Perception and Language in a More-than-Human World*. New York: Pantheon Books, 1996. 333 pages. $25.00 cloth. "Nobody writes about the ecological depths of the human and more-than-human world with more love and lyrical sensitivity than David Abram" (Theodore Roszak). A sleight-of-hand magician as well as a philosopher, Abram has lived and traded magic with indigenous magicians on several continents. Starting from the intimate relation between these practitioners and the animals, plants, and natural elements, his book draws the reader into investigations regarding the fluid, participatory nature of perception, and the reciprocity between our senses and the sensuous earth. This unfolds into an exploration of language, and the power words have to enhance or to stifle the spontaneous life of the senses. Our most cherished human attributes--from the gift of language, to the awareness of past and future, to the rational intellect itself--all emerge in interaction with the animate natural world, and remain wholly dependent upon that living world for their coherence.

"I know of no work more valuable for shifting our thinking and feeling about the place of humans in the world. Your children and their children will be grateful to him; the planet itself
must be glad"--James Hillman, psychologist). "Scholars will doubtless recognize its brilliance, but they may overlook the most important part of Abram's achievement: he has written the best instruction manual yet for becoming fully human. I walked outside when I was done and the world was a different place" (Bill McKibben). "A masterpiece--combining poetic passion with intellectual rigor and daring. Electric with energy, it offers us a new model of scholarly inquiry: as a fully embodied human animal. It opens pathways and vistas that will be fruitfully explored for years, indeed for generations, to come" (Joanna Macy, deep ecology activist). Abram is an ecologist and philosopher, with a PhD from SUNY, Stony Brook. (v6,#4)

Abram, David. "Between the Body and the Breathing Earth: A Reply to Ted Toadvine." Environmental Ethics 27 (2005):171-190. I take issue with several themes in Ted Toadvine's lively paper, "Limits of the Flesh," suggesting that he has significantly misread many of the arguments in The Spell of the Sensuous. I first engage his contention that I disparage reflection and denigrate the written word. Then I take up the assertion that I exclude the symbolic dimension of experience from my account, and indeed that I seek to eliminate the symbolic from our interactions with others. Finally, I refute his claim that my ecophenomenological stance leaves no room for resistance, contradiction, and alterity elements that are, in fact, central to my understanding of ethics. My reply leads directly into a discussion of one of the crucial concerns of my work: the manner in which the very style of our discourse way of wielding words tacitly works to either enhance, or to stifle, the solidarity between the human community and the more-than-human earth. (EE)


Abram, David. "Returning to our Animal Senses," Wild Earth 7 (no.1, 1997): 7. (v8,#2)

Abram, David; Light, Andrew; and Wenz, Peter. "Discussion of David Rothenberg's Hand's End." Research in Philosophy and Technology 15 (1995): 199. (v7, #3)


Abrams, Paula. "Population Control and Sustainability: It's the Same Old Song but With a Different Meaning," Environmental Law 27(no.4, 1997):1111-. (v9,#2)

AbuAsab, MS; Peterson, PM; Shetler, SG; Orli, SS, "Earlier plant flowering in spring as a response to global warming in the Washington, DC, area," Biodiversity and Conservation 10(no.4, 2001):597-612. (v.12,#4)


Acampora, Ralph R., "Using and Abusing Nietzsche for Environmental Ethics." *Environmental Ethics* 16(1994):187-194. Max Hallman has put forward an interpretation of Nietzsche's philosophy according to which Nietzsche is a prototypical deep ecologist. In reply, I dispute Hallman's main interpretive claim as well as its ethical and exegetical corollaries. I hold that Nietzsche is not a "biospheric egalitarian," but rather an aristocratically individualistic "high humanist." A consistently naturalistic transcendentalist, Nietzsche does submit a critique of modernity's Christian-inflected anthropocentrism (pace Hallman), and yet Cin his later work Che endorses exploitation in the quest for nobility (contra Hallman). I conclude that ecophilosophers need to exercise hermeneutical caution in any attempt to appropriate Nietzsche for environmentally ethical designs, lest they illegitimately ventriloquize their own moral voices into an authoritative but alien mouthpiece. Acampora is in philosophy, Emory University, Atlanta. (EE)

Acampora, Ralph R. *Corporal Compassion: Animal Ethics and Philosophy of Body*. Pittsburgh: University of Pittsburgh Press, 2006. Acampora critiques analytic approaches to animal rights and animal liberation and uses deconstruction, existentialism, hermeneutics, and phenomenology to develop an interspecies ethos and an animal ethic based on a philosophy of body that emphasizes the phenomenal and somatic commonality of living beings. He discusses practical applications such as animal experimentation and zoological exhibition and challenges animal practitioners to go beyond reform ethics, exploitation, and total noninterference toward a posthumanist culture of caring in a participatory manner.


Achtenmeier, Elizabeth, *Nature, God, and Pulpit*. Grand Rapids, MI: Eerdmans, 1992. 206 pages. $ 17. A biblically based study of preaching about nature and God. With sample sermons. "Few doctrines are so neglected as the doctrine of creation and yet none is more important to the gospel in the twentieth century." Achtenmeier is adjunct professor of homiletics at Union Theological Seminary in Richmond, VA. (v3,#4)

image of nature. Henk Verhoog, "Reading the book of nature"; Nico van der Perk, "Social criticism based on an image of nature"; Victor Westhoff, "The image of nature in non-literate societies in the higher-developed Eastern worldviews." Achterberg teaches philosophy at the University of Amsterdam. (v6,#3)

Achterberg, Wouter, Samenleving, Natuur en Duurzaamheid: Een Inleiding in de Milieufilosofie (Society, Nature and Sustainability: An Introduction to Environmental Philosophy). Assen, Netherlands: Van Gorcum, 1994. Achterberg provides a philosophical analysis of the environmental problematic from a social philosophical and ethical perspective. The book is primarily intended for use by students in environmental philosophy at universities and colleges, but can be of help to anyone interested in the environmental issues. Leading questions are 1) why our society seems to be inherently unable to utilize the environment in a sustainable way and 2) what structural changes can and should be made to change the current unsustainable utilization of the environment. Chapters include: 1) What is environmental philosophy? 2) Sustainability. History and analysis of the idea; 3) Whose environment? Tragedies and dilemmas? 4) Market economy, capitalism and the pressure to grow; 5) State and environmental crisis; 6) Environmental crisis and technology; 7) Attitudes towards nature, 8) Environmental Ethics: Respect for nature and intrinsic worth; 9) Environmental Ethics: Future generations. The book is comprehensive, provides an in-depth analysis of central concepts, positions and theoretical perspectives and offers valuable suggestions for structural change. It is recommended for anyone with a good command of the Dutch language. Achterberg teaches philosophy at the University of Amsterdam and is the ISEE contact for Europe.


Ackerman, Diane, *The Rarest of the Rare: Vanishing Animals, Timeless Worlds*. New York: Random House, 1995. $ 23.00 Rare species such as the Brazilian golden lion tamarin, monk seals in the Pacific, the short-tailed albatross on an island off the coast of Japan, and the migrations of the monarch butterfly. (v6,#4)

Ackerman, Diane. *A Slender Thread*. New York: Random House, 1997. A meditation on the interconnection of the human and natural worlds. The form is a quasi-journal that blends her observations on nature, as seen through Ackerman's garden windows, with her observations on human nature, as seen through her volunteer work at a local crisis center. Ackerman is also the author of *The Rarest of the Rare*, a look at endangered species, and *A Natural History of the Senses*, an effort to catch emotion and sensory beauty in words. (v8,#1)


Ackerman, Frank. *Why Do We Recycle?: Markets, Values, and Public Policy*. Washington, D.C.: Island Press, 1996. 180 pages. $29.95 cloth, $16.95 paper. The arguments for and against recycling, focusing on the debate surrounding the use of economic mechanisms to determine the value of recycling. Ackerman presents an alternative view of the theory of market incentives, challenging the notion that setting appropriate prices and allowing unfettered competition will result in the most efficient level of recycling. (v7, #3)

Ackland, Len, *Making a Real Killing: Rocky Flats and the Nuclear West*. Albuquerque: University of New Mexico Press, 1999. 308 pages. Rocky Flats, just outside Denver, Colorado, was a manufacturing site for hockey-puck sized cores, made of plutonium, that detonate nuclear weapons. The plant was built and operated before we knew how to handle nuclear wastes and the managers were under intense pressure to produce at break-neck speed to keep up with what it was presumed the Russians were doing, all under a veil of secrecy, which put the public at great risks they knew nothing about. Now these mistakes leave as legacy one of the worst pollution problems in the U.S., costing tens of millions of dollars each year, and difficult if not impossible to clean up. (v.12,#2)


Adam, Barbara. "Food for Thought: Timescapes of Risk." Environmental Values 8(1999):219-238. ABSTRACT: This paper explores the temporal dimension of risks associated with the production, trade and consumption of food. The paper operates at many levels of substantive and theoretical analysis: it focuses on problems for understanding and action that arise from the invisibility of the hazards, explores the effects of those hazards on consumers and sets out the differences in risks that are faced by farmers, processors, traders and consumers. With its emphasis on that which tends to be disattended in conventional social science analysis - the temporal and the invisible - the paper has implications for social theory at the level of ontology and epistemology. It concludes with reflections on the role of social theory in such contemporary timescapes of risk. KEYWORDS: Timescape, risk, innovative technology, food, invisible hazards. Barbara Adam, School of Social Science Cardiff University 50 Park Place, Cardiff CF1 3AT, UK (EV)

Adam, John A., Mathematics in Nature: Modelling Patterns in the Natural World. Princeton, NJ: Princeton University Press, 2003. Math in nature, leading to a deeper appreciation of such natural phenomena as cloud formation, tree heights, leaf patterns, butterfly wings, and even puddles and mud cracks. Adam is in math, Old Dominion University, Norfolk, VA. (v. 15, # 3)


Adams, Alexis, interviews Bill McKibben, "Dream a Little Dream," The Sun, October 2006, pp. 4-13. "We've been building this [environmental] movement for the last 150 years, and it has accomplished marvelous things: the conservation of wilderness; the reduction of pollution in the air and the water. But the movement isn't nearly big enough and strong enough to handle global warming, because climate change arises from the use of fossil fuels, which are at the heart of pretty much every part of modern life. A problem of this size can be tackled only with enormous changes in technology, in the economy, in our behavior, and in our very idea of who we are." "We know now that in terms of human rights, environmental damage, and almost any measure you can name, the endless-growth model has turned out to be a lousy idea." McKibben wants to replace "sustainability" with "durability."


probably the last for a long time. Majestic photographs of landscapes, with selections from Adams' letters that form a powerful statement on the imperative of wilderness conservation. (v2,#4)


Adams, Carol J., ed., Ecofeminism and the Sacred. Maryknoll, NY: Orbis Books, 1992. 250 pages. $ 16.95 paper. $ 39.95 cloth. Part I: Sallie McFague on an earthly theological agenda, Carol Lee Sanchez on the sacred connection between animal, vegetable, and mineral, Delores Williams on the womanist tradition on sin, defilement, and the environment, Judith Plaskow on feminist Judaism and repairing the world, Lena Gupta on Hinduism and ecofeminism. Part II: on animal consciousness, ecological politics, Goddess mythology, and others. Catherine Keller, Marjorie Procter-Smith, Jane Caputi, Rebecca Johnson, Andy Smith, Janet Biehl, Chellis Glendinning, Marti Keel, Teal Willoughby. [Editor's note: This book was in press but cancelled owing to a dispute over a pro-choice article. It was later published by Continuum, see that entry, in v5, #1.] (v3,#3)

Adams, Carol J., ed., Ecofeminism and the Sacred. New York: Continuum, 1993. 352 pages. $ 18.95. In patriarchal religions, the earthly female body has been profaned, while the transcendent male spirit has been sacralized. Women, animals, and nature in general have suffered systematic degradation and oppression. Twenty essayists wonder what might happen if the physical, sensuous world were seen as sacred. Feminist and womanist analyses of traditional religions; emergent ecofeminist spiritualities, and the way they might work in practice. This book was previously announced as an Orbis book (see Newsletter 3, 3, and more detail there), but, in last minute developments, Orbis refused to publish the book unless a pro-choice article was removed, which Adams refused to do, thereafter seeking another publisher. Orbis is under the jurisdiction of the Maryknoll Order, over which Cardinal O'Connor has canonical authority. See book review by Carol S. Robb in CTNS (Center for Theology and the Natural Sciences) Bulletin, Spring 1993. (v5,#1)


Adams, Jane, "Class: an Essential Aspect of Watershed Planning," Journal of Agricultural and Environmental Ethics 18(2005):533-556. A study of a watershed planning process in the Cache River Watershed in southern Illinois revealed that class divisions, based on property ownership, underlay key conflicts over land use and decision-making relevant to resource use. A class analysis of the region indicates that the planning process served to endorse and solidify the locally-dominant theory that landownership confers the right to govern. This obscured the class differences between large full-time farmers and small-holders whose livelihood depends on non-farm labor. These two groups generally opposed one another regarding wetland drainage. Their common identity as property owner consolidated the power wielded locally by large farmers. It also provided an instrument - the planning document - for state and federal government agencies to enhance their power and to bring resources to the region. Keywords Cache River - class - deliberative democracy - Southern Illinois - watershed planning Adams is in history, Southern Illinois University, Carbondale. (JAEE)

Adams, John, "The Emperor's Old Clothes: The Curious Comeback of Cost-benefit Analysis." Environmental Values Vol.2 No.3(1993) 247-260. ABSTRACT: Cost-benefit analysis is enjoying a resurgence. Despite its well documented failures in the past to cope with the environmental damage caused by major transport projects, and despite lack of progress in resolving the causes of these failures, Britain's Department of the Environment now proposes to apply it not just to projects, but to the formulation of policy. Curious. KEYWORDS: Cost-benefit analysis, valuation, willingness to pay, willingness to accept. Department of Geography, University College, London, 26 Bedford Way, London WC1H OAP, UK.


Adams, Jonathan M., et al. "The Case for Genetic Engineering of Native and Landscape Trees against Introduced Pests and Diseases." Conservation Biology 16(no. 4, August 2002):874-879. Important native forest trees and familiar landscape trees have been ravaged by introduced pests and diseases. Without human intervention many of these trees will become extinct. The problem is likely to get worse. Cautious transfer of resistance genes might be a desirable conservation strategy, gradually replacing the present trees with the transgensics. Adams is in natural resource science, University of Rhode Island. (v.13, #3)


Adams, Jonathan S., and McShane, Thomas O., The Myth of Wild Africa: Conservation without Illusion. "Europeans invented a mythical Africa, which soon claimed a place of privilege in the Western imagination" (p. xii). "Success lies ... in understanding that conservation and development, long at loggerheads, are two parts of a single process. Conservation cannot ignore the needs of human beings, while development that runs roughshod over the environment is doomed" (p. xix). (v 14, #3)


Adams, Jonathan, The Future of the Wild: Radical Conservation for a Crowded World. Boston: Beacon Press, 2005. Parks and protected areas are the cornerstone of conservation in a crowded world, but increasingly we have to worry about borders. Park and wilderness boundaries are artificial, drawn for political and social convenience rather than for ecosystemic reasons, illusory to all but humans. Conservation needs to be integrated across the landscape. Adams is a Nature Conservancy biologist.

Adams, Jonathan. The Future of the Wild: Radical Conservation for a Crowded World. Boston: Beacon Press, 2006. Adams, with the Nature Conservancy, argues that most conservation needs to be on private lands, since the government-preserved areas are but a fraction of the landscape. He advocates creating a world where farmers, ranchers, loggers, and other intensive users of the landscape participate in a civil community conversation about resources, where the continent=s surviving megaflora are allowed to return and roam unmolested among the corridors on private land that connect core conservation areas. One of his examples is Arizona rancher Warner Glenn, a lion hunter, who put down his gun and took the first photograph of a jaguar in the United States, and is now a lion hunter and jaguar (and lion) conservationist.

of Minnesota Press, 1994. 160 pages. $34.95; $16.95 paper. (v5,#2)


Adams, Michael, and Angelo Carfanga. *Coming of Age in a Globalized World: The Next Generation*. Bloomfield, CT: Kumarian Press, 2006. The authors discuss globalization and the case for world citizenship through global education, while reconciling the contrast between national bonds and global interests.

Adams, Noah, *Far Appalachia: Following the New River North*. New York: Random House, 2001. In search of Appalachian roots, Noah Adams took time off from hosting NPR's All Things Considered to follow the New River out of western North Carolina through Virginia and into West Virginia. He drove, hiked, and paddled, exploring the ecology, and became deeply appreciative of one of America's most beautiful regions. Listeners to ATC are still waiting for this to translate into good environmental reporting. (v.12,#4)


Adams, Rod D., *Liberal Education and the Environment: An Analysis of David Orr's Green Proposal for Higher Education*. M.A. thesis, Colorado State University, Fall 2003. Liberal education, David Orr argues, has been equipping students with industrial minds and proposes educating for ecologically literate minds instead. I examine his proposal in the light of the history of liberal education, which has two competing traditions, the rhetorical and the philosophical. Universities tend to emphasize one or the other at various times; a better education would enable students to make their own choices here. Orr requires ideals from both traditions, as well as elements from ancient, modern, and postmodern philosophy. (v.14, #4)

Adams, W. M., *Wasting the Rain: Rivers, People, and Planning in Africa*. Minneapolis: University of Minnesota Press, 1993. Co-published with Earthscan in the United Kingdom. 240 pages. $ 17.95, paper. For much of Africa, drought seems to be a permanent feature. Many attempts have been made to develop water resources through dams and irrigation schemes, but these have almost invariably failed. The best hope of appropriate development lies in working with local people using local knowledge. Adams wants to use the strength and diversity of indigenous water development in the difficult and often variable climate of Africa. The record of the modern, large-scale developments, particularly dams and irrigation schemes, has been poor and ineffective in conservation. (v4,#2)


Adams, William Mark, *Green Development: Environment and Sustainability in the Third World*. London and New York: Routledge, 1990, 1992. 257 pages. An analysis of the concept of sustainable development, with particular reference to the gulf between environment and development studies. The "greenness" of development is not to be found in a simple concern for the environment, but in a new understanding of the politics of the development process and the power of the poor to control and determine the future of their own environment. Adams is a lecturer in geography at the University of Cambridge. (v6,#3)

Adams, William M., Brockington, Dan, Dyson, Jane, and Vira, Bhaskar, "Managing Tragedies: Understanding Conflict over Common Pool Resources," *Science* 302(12 December 2003):1915-1916. "Conflicts over the management of common pool resources are not simply material. They also depend on the perceptions of the protagonists. Policy to improve management often assumes that problems are self-evident, but in fact careful and transparent consideration of the ways different stakeholders understand management problems is essential to effective dialogue." "Religious beliefs and moral convictions can be important in structuring understanding, both among local people and scientists." "To some extent, policy will always involve 'tragic' choices that contradict the deeply held values and beliefs of some stakeholders." Adams and Vira are in geography, Cambridge University. Brockington is in geography, Oxford University.

Adams, William M., "Biodiversity Conservation and the Eradication of Poverty," *Science* 306(12 November 2004):1146-1149. It is widely accepted that biodiversity loss and poverty are linked problems and that conservation and poverty reduction should be tackled together. However, success with integrated strategies is elusive and hard to find. There is sharp debate and the social impacts of conservation programs and the success of community-based approaches to conservation. The links between poverty alleviation and biodiversity conservation are here analyzed. (v.14, #4)


Adamson, Tim, "Measure for Measure: The Reliance of Human Knowledge on the Things of the World," *Ethics and the Environment* 10(no. 2, 2005):175-194. The notion that all knowledge is a form of measurement can be traced back to the Socratic insight that knowledge requires the presence of some standard against which things are measured. If experience and knowledge rely on some capacity for measurement, what is measurement and what does it entail. The most common contemporary answer to this question can be found in the notion that our experience
and knowledge are "constructed" by distinctly human, that is, cultural factors. This raises the question of the place and role of nature in our experience. My aim is to articulate a view of the measurement involved in human experience and knowledge, one which helps us to overcome the privileging of culture over nature that still plagues contemporary thought. My account is inspired by Merleau-Ponty's philosophy of the body, particularly his notion that the human body serves as a "measurant of things." Adamson is in philosophy at Iowa Wesleyan College and Adjunct Professor of Religion at the University of Iowa. (Eth&Env)


Adede, Andronico O., "The Treaty System from Stockholm (1972) to Rio de Janeiro (1992)," Pace Environmental Law Review 13 (no. 1, 1995):33-48. A "new breed" of treaty began to appear in this period, which tries to incorporate new concepts and concerns aimed at bringing about sustainable development. These include inter-generational equity, common but differentiated responsibility, caution against allowing a lack of scientific evidence to serve as a pretext for inaction, the polluter-pays principle, duties of co-operation and exchange of scientific information, trade and the environment, sovereignty and the environment, and the role of non-governmental organizations and local communities in the negotiation and implementation of environmental treaties. Above all, the "new breed" of treaties address, in greater detail, arrangements for both the transfer of funds to combat environmental problems and the transfer of environmentally sound technologies. Furthermore, they take into account the interest of developing counties to ensure their participation in both the negotiation and governance of such treaties. Adede is with the Office of Legal Affairs, United Nations, New York. (v8,#2)

Adelaja, Adesoji & Derr, Donn, & Rose-Tank, Karen, "Economic and Equity Implications of Land-Use Zoning in Suburban Agriculture", Journal of Agricultural Ethics 2(1989):97-112. A cash-flow viability model is used to evaluate the impacts of land-use zoning on farm households in New Jersey. Findings suggest that zoning results in increased production expenses, lower efficiency and profitability and the devaluation of land assets. The results suggest that the use of land-use zoning statutes to guarantee the existence of agriculture may not be equitable unless transferable development rights or other methods of compensating farmers for their losses are simultaneously implemented. Adelaja, Derr, Rose-Tank are in agricultural economics and marketing at Rutgers State University, New Jersey.

Adelaja, Adesoji O. and Brumfield, Robin, "Research Note on Equity and Ethics in State-Promotion of Agricultural Products", Journal of Agricultural and Environmental Ethics 4(1991):82-88. Many state governments in the United States promote locally-produced farm products. This paper discusses issues related to the ethics and equity of such promotional programs. The paper argues that generic promotion is generally easier to justify in terms of ethics and equity than brand promotion. It also argues that informative and factual brand promotions are easier to justify than deceptive and persuasive brand promotions. Additional
equity issues arising when taxpayers finance state-promotional programs are also discussed.


Adger, Neil and Katrina Brown, Land Use and the Causes of Global Warming. New York: John Wiley, 1995. 271 pages. $ 54.95. , 37.50. The scientific and policy debate concerning the roles of agriculture, forestry and other activities. How land use produces the greenhouse effect; emissions rates; uncertainties in estimating both the fluxes and the scale of land use change. All land use policies are multi-objective but the reduction of greenhouse gas emissions must be a key element in forestry and agriculture policy on a global basis. The authors are at the University of East Anglia. (v6,#4)

Adger, W. Neil, et al., "Social-Ecological Resilience to Coastal Disasters," Science 309(12 August):1036-1039. Almost as if prescient, Science devoted a theme issue in mid-August to "Dealing with Disasters." Half a dozen articles similar to the above. Predictably, many of the sorts of preparations for response recommended here were missing when Katrina hit two weeks later. A frequent theme is social networking, distributed infrastructure that absorbs hits in one region by resilience in another. Another theme is that disasters will inevitably come, storms, fires, droughts are part of the natural order. These will have increasing impact with larger populations, concentrating nearer coastlines and with global warming. The best management strategy is not the command and control of nature, not rebuilding nature, but a social structure that can roll with the punches, absorbing fire, flood, earthquakes.

Adger, W. Neil, Jouni Paavola, Seleemul Huq, and M. J. Mace, eds. Fairness in Adaptation to Climate Change. Cambridge, MA: The MIT Press, 2006. All countries will be endangered by climate change risks from flood, drought, and other extreme weather events, but developing countries are more dependent on climate-sensitive livelihoods such as farming and fishing and hence are more vulnerable. Despite this, the concerns of developing countries are marginalized in climate policy decisions.

Adler, Jonathan H., "Banning 'Biofoods': Precaution Can Be a Dangerous Tool," PERC Reports (Bozeman, MT) 17 (no. 4, September):8-9. Genetically engineered foods hold great promise, and it is more risky to ban them. In general the precautionary principle is being misused. "The idea behind the precautionary principle is that it is always better to be safe than sorry. In fact, however, adopting the precautionary principle is likely to make us more sorry than safe." Adler is a Senior Fellow at the Competitive Enterprise Institute in Washington, DC. (v.10,#3)

Adler, Jonathan H., "Wetlands, Waterfowl, and the Menace of Mr. Wilson: Commerce Clause Jurisprudence and the Limits of Federal Wetland Regulation." Environmental Law 29(no. 1, 1999):1-. This article examines the impact the Commerce Clause doctrine in United States v. Lopez will have on the federal government's ability to regulate wetlands. The author concludes that limiting federal regulation of wetlands may improve environmental protection efforts. (v.11,#1)

Adler, Matthew, "Incommensurability and Cost-Benefit Analysis," University of Pennsylvania Law Review 146(1998):1371-1418. "Cost-benefit analysis is a flourishing practice, desperately in need of a justification" (p. 1371). This is a theme issue on incommensurability and law. Adler teaches at the University of Pennsylvania Law School. (v.13,#2)


Adler, Matthew D., and Posner, Eric A., "Rethinking Cost-Benefit Analysis," The Yale Law Journal 109(1999):165-247. A book-length article. CBA is a useful decision procedure and it should be routinely used by agencies. CBA is superior to rival methodologies. It allows agencies to take into account all relevant influences on overall well-being, unlike simpler decision procedures such as risk-risk; and it enables agencies to weigh the advantages and disadvantages of projects in a clear and systematic way, unlike more complex decision procedures.

However, CBA serves these useful purposes only under certain conditions. First, CBA must give way to important nonwelfarist concerns, such as deontological rights. Second, CBA must give way when the endowments of affected people vary a great deal. Third, CBA may need to be adjusted to account for uninformed or distorted preferences. Interestingly, agencies already seem to depart from textbook CBA in order to respond to these concerns. Adler is in law, University of Pennsylvania. Posner is in law, University of Chicago.

Adler, Robert W., "Addressing Barriers to Watershed Protection", Environmental Law, 25(No.4, 1995):973-. A comprehensive review of the history of watershed programs in the United States and discusses the underlying issues preventing those programs from succeeding. Recognizing the need for comprehensive watershed-based protections, Adler concludes with a thorough analysis of recommendations for future watershed programs. (v7,#1)

examination of the health of the nation's waters, which turns out to be a complex and subtle
question to address. With recommendations for reauthorization of the Act. The authors are
attorneys at the National Resources Defense Council, Washington. (v4,#2)

Adriance, Madeline Cousineau, Base Christian Communities and the Struggle for the Amazon.
groups (the comunidades de base) are involved in land reform, advocacy for human rights, and
conservation. These political movements are motivated by a deep religious commitment.
Adriance is in sociology at Mount Ida College. (v6,#4)

Paris: Librairie Philosophique J. Vrin, 2007. This anthology in French contains many of the
major classical sources originally in English, including Thomas Birch, J. Baird Callicott,
Kenneth Goodpaster, Eric Katz, Arne Naess, Bryan Norton, Holmes Rolston III, Richard
Routley, Christopher Stone, and Paul Taylor. This is a welcome addition to the literature of
environmental ethics in French.

Africa - Environment and Wildlife is the best single source of reflective articles, raising the
ethical and philosophical issues in conservation for a literate audience. This is a magazine, not a
journal, issued six times a year and is a relative newcomer on the African scene. Several
examples are summarized in the bibliography below. (v6,#3)

Africa. A bibliography of environmental ethics and conservation in Africa is in the ISEE
Newsletter, vol. 6, no. 3. Fall 1995.

African Journal of Ecology, The, a scientific journal, is also published by the East African
Wildlife Society through Blackwells. (Africa) (v6,#3)

African National Congress, Mayibuye iAfrika--An Introduction to ANC Environmental Policy.

authors have brief articles on values and issues in conversation. Ian Player discusses the
importance of the environment to the psyche of humankind. Dawie de Villiers presents the
position of the new government on environmental strategies, David Varty examines ecotourism,
Carrie Curzon the illegal wildlife trade, George Hughes reports on the eighth CITES conference
and South Africa's position there, Nolly Zaloumis outlines threats to wetlands, Tony Pooley
examines South Coast degradation, Gerhard Verdoom describes the battle to save raptors, Basie
Maartens explains how hunting can conserve wildlife, Clive Walker explains the importance of
creating awareness in children, Raymond Byrne looks at waste facilities, Kader Asmal describes
the water supply limitations, Kraai van Niekerk looks at the uneasy relation between farming and
conservation, Jeunesse Searll shows how poverty is depleting Africa's natural forests, John
Hanks presents opportunities for private sector ecotourism, and more. (v6,#3)

African Wildlife is the official organ of the Wildlife Society, a conservationist organization with
general membership. Articles can be good, though not as explicitly probing as those in Africa -
Agar, Nicholas, "Biocentrism and the Concept of Life," Ethics 108(1997):147-168. "I have sought to show that our entrenched apparently anthropocentric moral views can take us some distance into nature. The representational account of life (developed in this article) acts as a bridge between living things and value-anchoring psychological notions (such as suffering pains and pleasures). It enables value to be spread very broadly throughout nature. Individual things are not all to be valued equally, however. The amount of value we assign to an individual depends on the range and complexity of goals that an organism is capable of. Why does this type of complexity matter? As organisms have more varied and numerous goals they tend to become more folk psychological. Folk psychological notions in turn have the closest association with relevant normative notions. Thus the life-representational ethic both acknowledges the preeminent place of humans on this planet and spreads value broadly enough to provide firm foundations for an environmental ethic." "Consciousness does not occupy such an important place in the life representational ethic. Many nonconscious organisms will be morally valuable. However, ... consciousness will open up novel varieties of goal to an organism" (p. 168). Agar is in philosophy, Victoria University of Wellington, New Zealand. (v9,#1)

Agar, Nicholas, Life's Intrinsic Value: Science, Ethics, and Nature. New York: Columbia University Press, 2001. Anything living is intrinsically valuable, from the bacteriophage T4 to humans. A biocentric ethic forms the platform for an ethic of the environment. Just as physical science once dislodged humans from the center of the universe, biological science challenges the received wisdom that only humans are valuable in themselves. Analysis of historic and contemporary views from Aristotle and Kant to E. O. Wilson, Peter Singer, Holmes Rolston III, Michael Ruse, and J. Baird Callicott.


Agar, Nicholas. "Valuing Species and Valuing Individuals." Environmental Ethics 17(1995):397-415. My goal in this paper is to account for the value of species in terms of the value of individual organisms that make them up. Many authors have pointed to an apparent conflict between a species preservationist ethic and moral theories that place value on individuals. I argue for an account of the worth of individual organisms grounded in the representational goals of those organisms. I claim that this account leads to an acceptably extensive species preservationist ethic. Agar is in the department of philosophy, Victoria University of Wellington, New Zealand. (EE)

Agarwal, Anil, Narain, Sunita. "Dying Wisdom: The Decline and Revival of Traditional Water Harvesting System in India," *The Ecologist* (1979) 27(no.3 1997):112. Over the centuries, villagers in India have developed a wide range of techniques to collect rainwater, groundwater, stream water, river water, and flood water. Since the colonial era, however, such water harvesting systems have been declining. Reviving them offers a realistic alternative to the large dams and water development projects promoted by the state authorities as a "solution:" to India's water crisis. (v8,#3)


Agenda 21 and the Rio Summit are the topics of all the articles in the *Colorado Journal of International Environmental Law and Policy*, Volume 4, no. 1 (Winter 1993). In addition to analyzing and interpreting the documents and such key concepts as "biodiversity" and "sustainable development," the articles explain the diplomatic process behind the documents and the status of the documents as "soft-law" treaties. $15.00 for the single issue. University Press of Colorado, P. O. Box 849, Niwot, CO 80544.


Agenda 21, produced at the Rio Earth Summit, is a long and rather unwieldy document (700-900 pages, depending on the printing format), 40 chapters. The whole thing is has been about $75.00, but a version has now been released for $25.00, if sold in developed countries (free copies are available in developing countries). There is both an English and a French text. Various introductions and short versions are appearing. It is also available, rather inexpensively or even free, on computer disk (if you supply your own disk). Also, various videos. United Nations Publications, Sales Section, Room DC2-853, United Nations, NY 10017. Phone 212/963-8300. 800/253-9646. (v4,#1)

**Agenda 21 and the UNCED Proceedings.** 6 volumes. Edited by Nicholas A. Robinson et al. Dobbs Ferry, NY: Oceana Publications, 1992-93. $450 hardbound; $75 per volume. (v5,#2)


Agnew, John, "From The Political Economy Of Regions To Regional Political Economy," *Progress In Human Geography* 24 (No. 1, 2000): 101- . (v.11,#2)

Agosta, Salvatore J., "Conservation biology: a mediator between Neo-Darwinism and alternative views on the origin and history of life," Biodiversity and Conservation 10(no.5, 2001):833-836. Conservationists and creationists may not agree about the origin of life, long ago. But they can and ought to agree about biodiversity in jeopardy here and now and in the future. Agosta is in biology, Frostburg State University, MD. (v.12,#4)

Agosta, William, Thieves, Deceivers, and Killers: Tales of Chemistry in Nature. Princeton, NJ: Princeton University Press, 2000. The venom that spiders use to kill their prey, the alarm pheromones that earthworms use to warn other earthworms of danger, and lots of organic chemistry used to deceive, kill, and steal in nature--also with big doses of anthropomorphic moralizing. (v.12,#4)


Agrawal, Arun. "The Community vs. the Market and the State: Forest Use in Uttarakhand in the Indian Himalayas", Journal of Agricultural and Environmental Ethics 9(1996):1-15. Most writers on resource management presume that local populations, if they act in their self-interest, seldom conserve or protect natural resources without external intervention or privatization. Using the example of forest management by villagers in the Indian Himalayas, this paper argues that rural populations can often use resources sustainably and successfully, even under assumptions of self-interested rationality. Under a set of specified social and environmental conditions, conditions that prevail in large areas of the Himalayas and may also exist in other mountain regions, community institutions are more efficient in managing resources than either private individuals or the central government. In advancing this argument, the paper undermines the often dogmatic belief in the universal superiority of private forms of ownership and management. Keywords: common property, resource management, forests, Himalayas, Uttarakhand, collective action, institutions, new institutionalism. Agrawal teaches political science at the University of Florida. (JAEE)


Oppressed Tradition of Caring Objectivity in Western Culture; Rob Witte, Spirituality and Agriculture, What Difference Would it Make?; Frans Verkleij. Spirituality and Ecological Agriculture; Wim Zweers, Ecological Spirituality as Point of Departure for an Intercultural Dialogue; Appendix 1: Petran Kockelkoren, Ethical Aspects of Plant Biotechnology (Report for the Dutch Government Commission on Ethical Aspects of Biotechnology in Plants); Appendix 2: Wim Zweers, Literature on Environmental Philosophy and Some Related Subjects. (v6,#4)

Aguera-Cabo (Agüera-Cabo), Mercè, "Gender, Values and Power in Local Environmental Conflicts: The Case of Grassroots Organisations in North Catalonia," Environmental Values 15(2006): 479-504. Not much attention has been paid to gender in environmental management and decision-making. This article explores how a gender dimension can contribute to the environmental debate by means of a comparative study of three environmental grassroots organisations in the North of Catalonia (Spain). The study shows that gender is significant for distinguishing different priorities between women and men in local conflicts and in environmental interests in general. The analysis of unequal power relations between genders in grassroots organisations leads us to discuss how women have fewer opportunities to influence the environmental debate and to advance their ideas. The concluding thoughts stress the need for developing a gender dimension in environmental management and decision-making, considering the opportunities that are presented by emerging governance practices, and particularly by participatory processes. (EV)


Aguire, A. Alonso, Richard S. Ostfeld, Gary M. Tabor, Carol House, and Mary C. Pearl, Conservation Medicine: Ecological Health in Practice. Oxford: Oxford University Press, 2002. Human health is linked with wildlife and ecosystem health. Medicine and conservation are more related than earlier realized, now becoming evident in the threat of pandemic diseases, where stresses on wildlife populations or deforestation trigger upsets that cause pathogens, previously contained in the wild, to jump to humans. Aguire is a wildlife biologist with Wildlife Trust, New York.


Ahmed, Miyan and Rukunaddin Laarman, Jan G., "Gender Equity in Social Forestry Programs in Bangladesh," Human Ecology 28(no.3, SEP 01 2000):433-. (EE v.12,#1)


Aiken, William, "The Goals of Agriculture and Weed Science," *Weed Science* 46(1998):640-641. Five goals for agriculture are: profitable production, sustainable production, environmentally safe production, satisfaction of human needs, and compatibility with a just social order. Four ways to view the origin of potentially conflicting value expressed in the five goals follow. In view of the five goals and differing value positions, the most pressing question for weed science is to what extent current methods of weed control are compatible with a more sustainable and environmentally sensitive agriculture. Aiken is in philosophy at Chatham College, Pittsburgh. (v.10,#3)


Aiken, William, "Human Rights in an Ecological Era." *Environmental Values* Vol.2 No.3(1992):191-204. ABSTRACT: After presenting a brief history of the idea of a human right to an adequate environment as it has evolved in the United Nations documents, I assess this approach to our moral responsibility with regard to the environment. I argue that although this rights approach has some substantial weaknesses, these are outweighed by such clear advantages as its action-guiding nature and its political potency. KEYWORDS: Ecological era, environmental rights, human rights, politics and the environment. Philosophy Dept., Chatham College, Pittsburgh, PA 15232, USA.


Aikin, Scott F., A The Dogma of Environmental Revelation, @ *Ethics and the Environment* 13(no. 2, 2008):23-34. Environmental revelationism is the view that there are preferred means of knowing the value and structure of nature, and these means are characterized by experiences of awe or ceremonial feelings of reverence. This paper outlines the dogmatic consequences of this view. Scott F. Aikin is a Lecturer in Philosophy at Western Kentucky University


Airaksinen, Timo, "Original Populations and Environmental Rights." Journal of Applied Philosophy 5 (1988): 37-47. Do indigenous populations have the right to maintain destructive environmental practices? The argument here suggests that original populations are part of natural environmental equilibria, and that if nature has intrinsic value, then the original population acquires strong rights to continue its way of life. Implying the necessity for compensation and the sharing of political power, this strong right to use the environment contrasts with policies of preservation. (Katz, Bibl # 2)

Aitken, Gill, "Conservation and Individual Worth," Environmental Values 6(1997):439-454. ABSTRACT: It is commonly supposed that individual animals are of little relevance to conservation which is concerned, instead, with groups of things or wholes such as species, habitats, and the like. It is further contended by some that by prioritising individuals, two of those values that are held dear by conservation--namely natural selection and fitness--are compromised. Taking wildlife rehabilitation as a paradigm case of concern for the individual, it is argued that the latter claim is based upon mistaken assumptions. Then, using red deer culling as a case study, the discord between conservation's holistic values and a concern for individual worth is explored. It emerges that the conservation value of red deer culling is more apparent than real and thus that there is more room for conservationists acceptance of individual worth than usually supposed. Philosophy Department, University of Lancaster, Lancaster LA1 4YG, UK (EV)


Aitken, Gill, AAnimal Suffering: An Evolutionary Approach,@ Environmental Values 17(2008):165-180. Though much is written about animal suffering, little is said about the nature of suffering itself. Without any clarity about its conceptual nature, discussions concerning detection, prevention and reduction of suffering are seriously hampered. This paper considers - and rejects - some of the more usual understandings of suffering (such as that suffering is synonymous with either pain or negative emotions). Instead, an alternative understanding of suffering is proposed, namely that suffering is the experiencing of one's life as going badly. This notion is tied to the loss of individuals' central life projects. It is suggested that non-human animals' central projects are their evolved survival skills. This alternative view of suffering has major implications for animal welfare.


Akama, John S., Lant, Christopher L., Burnett, G. Wesley. "A Political-Ecology Approach to Wildlife Conservation in Kenya," *Environmental Values* 5(1996):335-347. Kenya has one of the highest remaining concentrations of tropical savanna wildlife in the world. It has been recognized by the state and international community as a unique world heritage which should be preserved for posterity. However, the wildlife conservation efforts of the Kenya government confront complex and often persistent social and ecological problems, including land-use conflicts between the local people and wildlife, local peoples' suspicions and hostilities toward state policies of wildlife conservation, and accelerated destruction of wildlife habitats. This essay uses a political-ecological framework in the analysis of the social factors of wildlife conservation in Kenya. It postulates that the overriding socioeconomic issue impacting wildlife conservation in Kenya is underdevelopment. The problem of underdevelopment is manifested in forms of increasing levels of poverty, famine and malnutrition. The long term survival of Kenya's wildlife depends on social and ecological solutions to the problems of underdevelopment. KEYWORDS: Political-ecology, wildlife, underdevelopment, national park, conservation. (EV)

Akerman, Maria, "What Does `Natural Capital' Do? The Role of Metaphor in Economic Understanding of the Environment," *Environmental Values* 12(2003): 431-448. At the time of its introduction in the end of the 1980s, the concept of natural capital represented new, more ecologically aware thinking in economics. As a symbol of novel thinking, the metaphor of natural capital stimulated a debate between different disciplinary traditions on the definitions of the concept and research priorities and methods. The concept became a means to control the discourse of sustainable development. In this paper, I focus on the power/knowledge implications of the use of the concept, and I follow the career of the concept of natural capital in ecological economic publications between the years 1988 and 2000. The main interests are(1) in the use of the concept to affect the rules according to which claims concerning sustainable development can be made and (2) in the constitution of objects of environmental knowledge. (EV)


Akimoto, Hajime, "Global Air Quality and Pollution," *Science* 302(5 December 2003):1716-1719. Intercontinental transport and hemispheric air pollution by ozone jeopardize agricultural and natural ecosystems worldwide and have a strong effect on climate. Aerosols are spread globally but have a strong regional imbalance. In the 1990's nitrogen oxide emissions from Asia surpassed those from North America and Europe and should continue to exceed them for
decades. International initiatives to mitigate global air pollution require participation from both developed and developing countries. Akimoto is a global change researcher, Yokohama, Japan.

Akkerman, Abraham, "Urban planning in the founding of Cartesian thought," Philosophy and Geography 4 (No. 2, 2001): 141-167. It is a matter of tacit consensus that rationalist adeptness in urban planning traces its foundations to the philosophy of the Renaissance thinker and mathematician René Descartes. This study suggests, in turn, that the planned urban environment of the Renaissance may have also led Descartes, and his intellectual peers, to tenets that became the foundations of modern philosophy and science. The geometric street pattern of the late middle ages and the Renaissance, the planned townscape, street views and the formal garden design, appeared as parables for the perfection of the universe and the supremacy of critical reason. It is within this urban metaphor that Descartes' account betrays perceptual and conceptual impact from the contrast between convoluted medieval townscape and the emerging harmonious street patterns where defined vistas and predictable clarity of street views were paramount. The geometrically delineated street views of the Renaissance new town became the spark that lit the philosopher's sagacity in reflecting upon the concept of 'clear and distinct ideas'. Past suggestions that Descartes was led to his philosophical breakthroughs through his discovery of co-ordinate geometry reinforce further the stance that Renaissance planning predisposed rationalist thought. Akkerman is Professor of Geography and Director, Regional and Urban Development Program, University of Saskatchewan. (P&G)


Alaimo, Stacy. "Cyborg and Ecofeminist Interventions: Challenges for an Environmental Feminism." Feminist Studies 20, no.1 1994:133-52. (v7, #3)


Albanese, Catherine L., Nature Religion in America: From the Algonkian Indians to the New
Age. University of Chicago Press, 1990. 267 pages, $24.95. Five chapters examine nature as symbolic religious center in the views of the aboriginal Americans and the first Europeans; in the "organic" compact of the Founders; in the Transcendentalists; in the "sectarian healers" of the late 19th century; and finally in several contemporary manifestations. The Amerindians' sense of themselves as a part of nature contrasts with the Puritan's fears of wilderness. These themes were subsumed, to a degree, by the Freemasons of the early republicans. But when Emerson, Thoreau and John Muir attempted to reconcile these disparate legacies, they only succeeded in transforming them into another conundrum: an Aristotelian belief in nature as "really real" versus a Platonic concept of nature as "ideal" or "illusory." In the course of her survey, Albanese examines several kinds of late 19th century mind cures; herbalists, homeopaths, chiropractors and others preached a kind of Christian physiology teaching that harmony with natural forces was a means to ordering and using those forces for one's own good and the good of society. Einstein and Planck upset the belief in such an order, but the new, fluid science of the 20th century has produced today "recapitulated pieties" of the nation's beginnings, as in the writings of Annie Dillard. At issue in this ethereal debate was the tangible question of whether human beings were to harmonize with nature or to have mastery over it. Really a set of far-ranging essays more than a narrative account of nature religion in America. Albanese is professor of religious studies at the University of California at Santa Barbara. (v1,#4)


Albers, Heidi J., Amy W. Ando, and Daniel Kaffine, "Land Trusts in the United States: Analyzing Abundance," Resources (Resources for the Future), Spring 2004, Issue No. 153, pp. 9-13. There are now 1,200 trusts conserving 6 million acres, and trusts are protecting an average of 500,000 additional acres each year. Surprisingly, states where federal, state, and local agencies protect vast areas often have a high concentration of land trusts as well. (v. 15, # 3)


Albrecht, Glenn, "Thinking Like an Ecosystem: The Ethics of the Relocation, Rehabilitation and Release of Wildlife," Animal Issues (University of Sydney, Australia) 2, no. 1, 1998. (v.10,#1)


Albrecht, Virginia S. "District Court Rules that Clean Water Act Does Not Regulate Draining, Landclearing, and Excavation in Wetlands," Journal of Environmental Law & Practice 4(no.6, 197):55. (v8,#3)


Alcock, John, *The Masked Bobwhite Rides Again*. Tucson: University of Arizona Press, 1993. An invitation to urbanites in the U. S. Southwest to venture forth and learn more about the Sonoran desert, a dynamic landscape on which the human population has exploded. (v4,#3)


Aldred, Jonathan, "Existence Value, Welfare and Altruism." *Environmental Values* 3(1994):381-402. Existence Value has become an increasingly important concept as the use of cost benefit analysis has spread from traditional applications to attempts to place monetary value on, for instance, a rare wetland habitat. Environmental economists have generally accepted the tensions arising in existence value concept from the range of recent applications, but it is argued here that their various attempts to resolve the difficulties have largely failed. Critics from outside economics, on the other hand, typically claim that the very notion of existence value as understood in economics is flawed, and urge its abandonment altogether. This paper suggests, instead, a fundamental redefinition of existence value, which, it is argued, (i)explains a number of diverse problems posed by the usual meaning of the term in economics; (ii)does not strain the intentions of respondents to 'willingness-to-pay' surveys; (iii)is consistent with a more realistic model of rational choice in environmental decision-making; and (iv)is sensitive to criticisms from environmental ethics. KEYWORDS: Existence value, contingent valuation method, welfare, commitment, altruism, incommensurable choices. Aldred is at Sidney Sussex College, Cambridge, U.K. (EV)

Aldred, Jonathan, "Cost-Benefit Analysis, Incommensurability and Rough Equality," *Environmental Values* 11(2002):27-47. A recurring question about cost-benefit analysis (CBA) concerns its scope. CBA is a decision-making method frequently employed in environmental policy-making, in which things which have no market price are treated as if they were commodities. They are given a monetary value, a form of price. But it is widely held that some things cannot be meaningfully priced, thus substantially limiting the scope of CBA. The aim of this paper is to test some aspects of this broad claim, focusing on problems of incomparability and incommensurability. In particular, the role of rough equality as a putative form of comparison is investigated. I argue that while an assessment of the full significance of rough equality for practical decision-making awaits resolution of a number of important technical
questions, it does not provide a strong enough form of comparison to support CBA. (EV)


Alexander, Charles P., "For the Birds," Time 157 (no. 2, June 4, 2001):66-67. Bird watching is hotter than ever, though 15% of 800 species that reside in or migrate through the U.S. are in serious decline. Main trouble: sprawl. Can fifty million birdwatchers turned conservationists save the environment? David Allen Sibley's The Sibley Guide to Birds has sold half a million copies in the first six months, the fastest selling bird book in history. (v. 12, #3)


Alexander, Donald, "Bioregionalism: Science or Sensibility," Environmental Ethics 12(1990):161-173. A criticism of the bioregional movement in environmental philosophy for its unclear and incorrect philosophical and scientific concepts: e.g., definition of bioregion, boundaries of bioregion, and reverence for natural law. Bioregionalism should not be a scientific concept but a cultural sensibility, a social value. Region is a dialectical concept integrating both human and natural parameters. (Katz, Bibl # 2)

Alexander, Donald. "Bioregionalism: Science or Sensibility?" Environmental Ethics 12(1990):161-73. The current interest in bioregionalism, stimulated in part by Kirkpatrick Sale's Dwellers in the Land, shows that people are looking for a form of political praxis which addresses the importance of region. In this paper, I argue that much of the bioregional literature written to date mystifies the concept of region, discounting the role of subjectivity and culture in shaping regional boundaries and veers toward a simplistic view of "nature knows best." Bioregionalism can be rehabilitated, provided we treat it not as a "revealed wisdom" for the reconstruction of human society, but as a sensibility and environmental ethic that can infuse our work even as we make use of the functional regionalisms that increasingly shape people's consciousness. I conclude by citing Lewis Mumford's concept of a region as capturing the
dialectical interplay of natural and cultural elements. Alexander is at the School of Urban and Regional Planning, University of Waterloo, Ontario. (EE)


Alive Now!, January/February 1991, is a special issue, "The Earth." 64 pages. This is an inspirational guide for high school youth published by the Methodist Church. Various short quotations from Robinson Jeffers, Joseph Meeker, Holmes Rolston, Jay McDaniel, Thomas Berry, Gary Snyder, Wendell Berry, native Americans, African, Australian and other indigenous peoples, Jewish liturgies, as well as from the Bible. Some of the materials are composed by youth. Contact: The Upper Room, 1908 Grand Avenue, P. O. Box 189, Nashville, TN 37202-0189. (v1,#4)

Alkon, Alison Hope, "Place, Stories and Consequences: Heritage Narratives and the Control of Erosion on Lake County, California Vineyards", Organization and Environment 17 (no. 2, June 2004).

Alkorta, I; Albizu, I; Garbisu, C, "Biodiversity and agroecosystems," Biodiversity and Conservation 12(no.12, 2003):2521-2522. (v.14, #4)


Allan, JD, et al., "Overfishing of Inland Waters," BioScience 55 (no. 12, December 2005): 1041-1051. Inland waters have received slight consideration in recent discussions of the global fisheries crisis, though they provide much needed protein, jobs, and income, especially in rural
communities of developing countries. Systematic overfishing of fresh waters is largely
unrecognized because of weak reporting and because fishery declines take place within a
complex of other pressures. Moreover, the ecosystem consequences are poorly understood.
These complexities underlie the paradox that overexploitation of a fishery may not be marked by
declines in total yield, even when individual species and long term sustainability are highly
threatened. Indeed, one symptom of intense fishing in inland waters is collapse of particular
stocks even as overall fish production rises. Ca biodiversity crisis more than a fisheries crisis.

Allan, Tony and Andrew Warren, eds., Deserts: The Encroaching Wilderness. New York:
Oxford University Press, 1993. 200 pages. 180 photos, 30 maps. $ 35.00. Both are companion
(v4,#4)

Allen, Antonio, Review of Goodman, David and Michael Redclift, eds., Environment and

Allen, Bryon P., and John B. Loomis, "Deriving values for the ecological support function of

Cambridge, MA: MIT Press. (v9,#2)

Allen, Colin and Marc D. Hauser, "Concept Attribution in Nonhuman Animals: Theoretical and
Methodological Problems in Ascribing Complex Mental Processes," Philosophy of Science
58(1991):221-240. The demise of behaviorism has made ethologists more willing to ascribe
mental states to animals. However, a methodology that can avoid the charge of excessive
anthropomorphism is needed. Allen and Hauser describe a series of experiments that could help
determine whether the behavior of nonhuman animals towards dead conspecifics is concept
mediated. The behavior of some animals is clearly guided by complex mental processes. The
techniques developed by comparative psychologists and behavioral ecologists are able to provide
us with the tools critically to evaluate hypotheses concerning the continuity between human
minds and animal minds. Allen is in the Department of Philosophy at Texas A&M University.
Hauser is in the Department of Zoology at the University of California, Davis. (v2,#2)


Allen, Colin, and Bekoff, Marc, Species of Mind: The Philosophy and Biology of Cognitive

Allen, Colin; Bekoff, Marc; and Lauder, George, eds. Nature's Purposes: Analyses of Function
and Design in Biology. Cambridge, MA: MIT Press, 1998. 603 pages. 22 papers, mostly from
philosophy journals. The dogma is that teleology is unscientific, and in some contexts it is, but
in other contexts biologists can avoid it only with implausible circumlocution. Long hair on
dogs has the purpose (function) of keeping them warm; it does not have the purpose of harboring
fleas, though it does both these things well. Some scientists consider teleology a shorthand for
phenomena that could be expressed more accurately eliminating it, but others find it the best way to express what they need to say about what is going on in the world. The editors are a philosopher, a student of animal behavior, and a functional morphologist. (v.9,#3)


Allen, John, ed., Environment 90/91. Guilford, CT: Dushkin Publishing Group, 1990. In the annual editions series. Thirty-one reprints of recent magazine feature articles on the environment, for example Time's "What on Earth Are We Doing?" (cover story of their "Planet of the Year" issue), Environment's "The Intertwining of Environmental Problems and Poverty," National Wildlife's "21st Environmental Quality Index: The Planet Strikes Back," Science News', "Where Acids Reign," and "Lessons from the Flames" (Yellowstone fires). Sections on people and hunger; energy; pollution; land, water, and air; and! endangered species. Journal articles make easier reading for lower level students in environmental ethics, and they give upper level students opportunity to analyze media coverage of issues. Articles are chosen to be timely, relevant, and provocative. (v1,#2)

Allen, Scott Stetson, Crux Reality: A Climber's Guide to Philosophy. Boulder, CO: Climbing Arts Council, 1992 (875 Alpine Ave., Apt. 22, Boulder, CO 80304-3241). 91 pages. Paper. $ 5.00. Short introductions to various philosophers--Heidegger, Marcuse, Foucault, Sartre, Marcel, Unamuno, Orta y Gasset--mixed with some thoughts on rock climbing, why, the mind of a climber, and the ethics of climbing. "Heroic modern thinkers and ideas that can provide enlightenment for even the most ridiculous of vertical pursuits." A sample: Nietzsche: "Philosophy, as I have hitherto understood and lived it, is a voluntary living in ice and high mountains--a seeking after everything strange and questionable in existence" (p. 4). Allen has a degree in philosophy from Colorado College, and is now a public schoolteacher. (v4,#4)

Allen, TFH; Tainter, JA; Pres, JC; Hoekstra, TW, "Dragnet Ecology- Just the Facts, Ma'am': The Privilege of Science in a Postmodern World," Bioscience 51(no. 6, 2001):459-468. (v.13,#1)

Allen, Timothy F. H. and Thomas W. Hoekstra, Toward a Unified Ecology. New York: Columbia University Press, 1992. An attempt to bring basic ecology to bear on ecological management, with particular attention to differences of scale. Allen is professor botany, University of Wisconsin, Madison. Hoekstra is at the Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado. (v4,#2)

Allen, William, Green Phoenix: Restoring the Tropical Forests of Guanacaste, Costa Rica. New York: Oxford University Press, 2001. A narrative account of the development of Costa Rica's small, under-resourced Santa Rosa National Park into the impressively expanded and managed Guanacaste Conservation Area. Biology is only one piece of the action; the most is political,
social, and economic elements—all the way from local farmers to powerful big landowners with vested interests to U.S. involvement and interests in Nicaragua. A key example of where researchers have become involved in these other aspects of conservation with great effectiveness. (v.12,#2)


Allen, William H. "The Varied Bats of Barro Colorado Island", Bioscience 46(no.9, 1996):639. What roles do tropical bats play in forest regeneration?

Allen, William, "Restoring Hawaii's Dry Forests," Bioscience 50(no.12, 2000 Dec 01): 1037-. (v.12,#3)


Allendorf, Fred W., Bayles, David, Williams, Thomas H. "Prioritizing Pacific Salmon Stocks for Conservation," Conservation Biology 11(no.1, 1997):140. (v8,#2)


Almond, Brenda, "Environmental Values," in her Moral Concerns (Atlantic Highlands, NJ: Humanities Press International, 1987). "A language of values may meet environmentalist needs better than a language of narrowly defined morality and, specifically, of duties." But Almond is not sure that we can "formulate the notion of objects of value outside the experience of human beings," although when humans do experience natural things they can value them for what they are in themselves. Almond is reader in philosophy and education, University of Hull. (v1,#4)

Critique of Deep Ecology," and response by Alan R. Drengson (Philosophy, University of Victoria). (v4,#3)


Alperovitz, Gar. ASqueezed Out: The Plight of the Middle Class.@ Christian Century Vol. 124, no. 1 (2007): 26-9. This is a critical review of Norton Garfinkel=’s The American Dream vs. the Gospel of Wealth: The Fight for a Productive Middle-Class Economy (New Haven: Yale University Press, 2006) and Thom Harrington=’s Screwed: The Undeclared War Against the Middle Class (San Francisco: Berett-Kohler, 2006). Alperovitz himself is the author of America Beyond Capitalism: Reclaiming our Wealth, Our Liberty and Our Democracy (Hoboken, NJ: J. Wiley, 2005). ALong-term trends toward relative and absolute inequality have not been, and are unlikely to be reversed until major changes in the political context occur. Long-term trends of environmental decay also have not been, and are unlikely to be reversed.@ Capitalists are equally enthusiastic about exploiting both labor and nature. A major factor is the enormous economic problems caused by globalization rather, caused by the way in which corporate and other political elites have dealt with globalization.@ AThe U.S. remains the wealthiest nation in the history of the world, yet AThe U.S. is by far the most unequal of all the advanced nations.@ For wealth ownership: A[A] mere 1 percent owns just under half of all corporate and other productive business wealth. A mere 5 percent owns 70 percent of such wealth.@ Alperovitz teaches political economy at the University of Maryland.

Stewardship is taking care of something for someone else. Originally, a steward was a person who managed household affairs for a landowner. In natural resource management, stewardship often refers to voluntary actions taken by private landowners to promote ecological goals on their own lands. Stewardship may have an instrumental rationale, such as the human need for natural resources; or an intrinsic rationale, such as the moral rights of species to exist. (v.11,#4)

Alpert, Peter. "The Boulder and the Sphere: Subjectivity and Implicit Values in Biology." *Environmental Values* 4(1995):3-15. Science is inherently subjective. The experience of dissertation research in ecology showed how intuitively derived hypotheses and assumptions define the questions one asks and the variables one measures, and how idealised forms and generalised types facilitate analysis but distort interpretation. Because these conceptual tools are indispensable to science, subjectivity is ineluctable. This has moral implications. Scientists are responsible for the particular abstractions they select and must therefore accept some moral responsibility for the way their results are used. Those who use scientific results have an equal responsibility to acknowledge the significance of the methods and not just of the conclusions. In biology, subjectivity may also have a positive side. A wide consensus of ecological biologists accept, on the apparently neutral grounds of accumulated study, a set of generalisations that society at large treats more as philosophical beliefs. This category of implicit values in biology holds much promise for improving our relations with nature and each other. KEYWORDS: biology, values, subjectivity  Alpert is in the department of biology, University of Massachusetts. (EV)

Alrøe, Hugo Fjelsted and Erik Steen Kristensen. "Toward a Systemic Ethic: In Search of an Ethical Basis for Sustainability and Precaution." *Environmental Ethics* 25(2003):59-78. There are many different meanings of sustainability and precaution and no evident connection between the new normative concepts and the traditional moral theories. We seek an ethical basis for sustainability and precaution that can serve as a means of resolving the conceptual ambiguities of the new normative concepts and the conflicts between new and traditional moral concepts and theories. We employ a systemic approach to analyze the past and possible future extension of ethics and establish an inclusive framework of ethical extension. This framework forms the basis for what we call a systemic ethic.(EE)

Alroje, Hugo Fjelsted, Mette Vaarst, and Erik Steen Kristensen. "Does Organic Farming Face Distinctive Livestock Welfare Issues? - A Conceptual Analysis." *Journal of Agricultural and Environmental Ethics* 10(2001):275-299. The recent development and growth of organic livestock farming and the related development of national and international regulations has fueled discussions among scientists and philosophers concerning the proper conceptualization of animal welfare. These discussions on livestock welfare in organic farming draw on the conventional discussions and disputes on animal welfare that involve issues such as different definitions of welfare (clinical health, absence of suffering, sum of positive and negative experiences, etc.), the possibility for objective measures of animal welfare, and the acceptable level of welfare. It seems clear that livestock welfare is a value-laden concept and that animal welfare science cannot be made independent of questions of values and ethics. The question investigated here is whether those values that underpin organic farming, in particular, also affect the interpretation of livestock welfare, and, if so, how. While some of the issues raised in connection with organic farming are relatively uncontroversial, others are not. The introduction of organic farming values seems to introduce new criteria for what counts as good animal welfare, as well as a different ethical basis for making moral decisions on welfare. Organic farming embodies distinctive systemic or
communitarian ethical ideas and the organic values are connected to a systemic conception of nature, of agriculture, of the farm, and of the animal. The new criteria of welfare are related to concepts such as naturalness, harmony, integrity, and care. While the organic values overlap with those involved in the conventional discussion of animal welfare, some of them suggest a need to set new priorities and to re-conceptualize animal welfare - for example, with respect to "naturalness," in relation to the possibilities for expression of natural behavior and in relation to animal integrity as a concept for organismic harmony. The organic perspective also seems to suggest a wider range of solutions to welfare problems than changes in farm routines or operations on the animals. The systemic solutions include the choice and reproduction of suitable breeds, changes in the farm structure, and changes in the larger production and consumption system - including consumer perceptions and preferences. But the organic values may also call for sacrifices of individual welfare in a conventional sense in order to advance welfare from the perspective of organic farming. Whether this is good or bad cannot be decided without entering into an inquiry and discussion of the values and ethics involved. Keywords: animal welfare, integrity, naturalness, organic farming, systemic perspective. The authors are at the Danish Research Centre for Organic Farming, Foulum, Tjele. (JAEE)


Altherr, Thomas L., and John F. Reiger, "Academic Historians and Hunting: A Call for More and Better Scholarship," Environmental History Review 19(1995):39-56. A call to academic historians to explore the potential hunting history holds for the field, to leave ideological baggage behind, and to study hunters in their own words and in the context of their own time. Areas for research in hunting history are abundant. Altherr is at Metropolitan State University, St. Paul, MN. Reiger is at Ohio University, Chillicothe. (v6,#4)


Altner, Günter, Naturevergessenheit: Grundlagen einer umfassenden Bioethik (Nature Forgotten: Towards a Comprehensive Bioethic). Darmstadt: Wissenschaftliche Buchgesellschaft, 1991. 319 pages. Hardbound. ISBN 3-534-80043-5. DM 29,80. Altner argues that the prevailing attitude towards nature is disastrously inadequate, resulting in the destruction of nature. We need an all-embracing reverence for life. Altner works through Cartesian subject-object dualism, the bioethics of Singer, Birnbacher, and Schweitzer, bioethics and creation theology, bioethics and evolutionary science, bioethics and technology, and then presents his own comprehensive bioethics. Some of the issues he confronts include domestic animals, meat-eating, animal experimentation, landscapes, energy policy, climate change, gene technology, population control. One touchstone for a bioethic is "the obligation of solidarity with the unborn, the handicapped, and the dying. Whoever is unwilling to protect life of this sort will also be so in areas more remote from humanity. But a bioethic would be falsely and inadequately fulfilled if the all-embracing respect for life did not reach through humans to their deepest level of obligation. How could non-human nature have a value for us, if we are not aware of it in and through our own human selves" (from the Introduction). Altner holds doctorates in both
theology and biology and is professor of theology at the University of Koblenz-Landau and a board member of the Ecological Institute of Freiburg. (v5,#2)


Alverson, William S., Donald M. Waller, and Walter Kuhlmann, Wild Forests. Washington, DC: Island Press, 1994. 320 pages. $29.95. A review of the scientific and policy issues surrounding biological diversity in contemporary forest management, evaluating specific approaches proposed to ameliorate diversity losses. One such model is the Dominant Use Zoning Model with an integrated network of Diversity Maintenance Areas, which the authors have urged on the U.S. Forest Service in Wisconsin. The authors argue that wild or unengineered conditions are those that are most likely to foster a return to the species richness that we once enjoyed. Alverson and Waller are at the University of Wisconsin-Madison; Kuhlmann is an environmental lawyer in Wisconsin. (v5,#1)


Alward, Peter. "The Naive Argument Against Moral Vegetarianism." Environmental Values 9(2000):81-89. ABSTRACT: The naive argument against moral vegetarianism claims that if it is wrong for us to eat meat then it is wrong for lions and tigers to do so as well. I argue that the fact that such carnivores lack higher order mental states and need meat to survive do suffice to undermine the naive argument. KEYWORDS: Ethics, applied ethics, vegetarianism, animal welfare, naive argument. Peter Alward is in the Department of Philosophy College of Charleston, Charleston, SC, 29424-0001.


Ambio: A Journal of the Human Environment is published by the Royal Swedish Academy of Sciences, with an international focus. Articles in English. Contact: Royal Swedish Academy of Sciences, Box 50005, S-104 05 Stockholm, Sweden. (v2,#3)

Ambler, Rex, Global Theology: The Meaning of Faith in the Present World Crisis (Philadelphia: Trinity, 1990). 90 pp. paper. Pollution, depletion of natural resources, and the continuing threat of nuclear war illustrate the fragility of our planet. They also fuel a spiritual crisis. Ambler points the way toward a responsible faith that does not take tragedy as the last word. (v1,#3)

American Behavioral Scientist 43(No. 4, 2000) is a theme issue on environmental justice. Entries have been separately listed. (v.11,#1)

American Forests. Vol 101, nos. 7 and 8. July/August 1995. Theme issue on wildlife,
prescribed fire. (v6,#4)


American Plastics Council. The American Plastics Council is promoting their policy of community-based decision-making; namely, "there is no nationwide, 'one-size-fits-all' solution" to solid waste and recycling. Two articles are being distributed: Poore, Patricia. "Is Garbage an Environmental Problem?" From Garbage magazine, December 1993. Challenges the view that there is a garbage crisis. (v5,#2) Boemer, Christopher and Kenneth Chilton. "False Economy: The Folly of Demand-Side Recycling." From Environment, January/February 1994. Examines the economics of recycling and what makes good public policy. (v5,#2) For copies of the articles, which are available free while quantities last, contact: American Plastics Council; 1275 K Street NW, Suite 400; Washington, DC 20005; FAX 202-371-5679. (v5,#2)

Ames, Roger T. "Taoism and the Nature of Nature." Environmental Ethics 8(1986):317-50. The problems of environmental ethics are so basic that the exploration of an alternative metaphysics or attendant ethical theory is not a sufficiently radical solution. In fact, the assumptions entailed in a definition of systematic philosophy that gives us a tradition of metaphysics might themselves be the source of the current crisis. We might need to revision the responsibilities of the philosopher and think in terms of the artist rather than the "scientific of first principles." Taoism proceeds from art rather than science, and produces an ars contextualis: generalizations drawn from human experience in the most basic processes of making a person, making a community and making a world. This idea of an "aesthetic cosmology" is one basis for redefining the nature of the relatedness that obtains between particular and world--between tao and te. Ames is in the department of philosophy, University of Hawaii at Manoa, Honolulu, HI. (EE)


Amphibian and Reptile Conservation is a new journal. Contact Craig Hassapakis, 2255 North University Parkway, Suite 15, Provo, UT 84604-7506. Email: ARC@byu.edu (v8,#1)

Anand, Paul. "Decisions vs. Willingness-to-Pay in Social Choice." Environmental Values 9(2000):419-430. Abstract: The paper compares use of willingness to pay values with multi-attribute utility as ways of modelling social choice problems in the environment. A number of reasons for moving away from willingness to pay are reviewed. The view proposed is that social choice is about the integration of competing claim types (utilities, rights, social contracts and beliefs about due process). However, willingness to pay is only indirectly related to the first of these and assumes an Arrovian approach, namely one in which social choice is regarded as the aggregation of people's preferences. Keywords: Willingness to pay, applied social choice, multi-attribute utility theory, environmental decision making, capability rights. Paul Anand is at The Open University, Milton Keynes, MK7 6AA, UK. (EV)


Andelman, SJ; Bowles, CM; Willig, MR; Waide, RB, "Understanding Environmental Complexity through a Distributed Knowledge Network", BioScience 54 (no.3, 2004): 240-246(7). Understanding environmental complexity and other dimensions of ecological systems necessitates a holistic approach that can be achieved only by identifying, retrieving, and synthesizing diverse data from distributed sources; by collaborating with other scientists from a broad range of disciplines; and by investigating many different systems. Knowledge Network for Biocomplexity (KNB) is developing new software tools to advance ecological understanding through discovery, access, retrieval, and management of distributed and heterogeneous ecological and environmental data. To address the need for cultural change in ecologists and other environmental scientists and to promote collaborative and synthetic approaches, KNB and the National Center for Ecological Analysis and Synthesis are training a cadre of young investigators in techniques for the management and analysis of ecological data, with emphasis on multiscale integration and synthesis.

Andersen, Carl Christian, Okofilosofisk Perspektiv pa skjonnlitteraturen (An Ecophilosophical Perspective on Literature). M.A. thesis in the Department of the History of Ideas, University of Oslo. Examines some representative selections from literature, West and East, for their ecological view of the world, for example Ernest Hemingway's Old Man and the Sea, and some Japanese haiku. Andersen is now teaching at Nansenskolen in Lillehammer, Norway, a humanistic academy of higher education. (Norway)


Andersen, Mikael Skou. "Assessing the Effectiveness of Denmark's Waste Tax," Environment 40(no. 4, May 1998):10-. The waste tax that Denmark introduced in 1987 has contributed to an increase in the country's recycling rate, but further changes will be needed for it to realize its full potential. (v9,#2)

Andersen, Milael Skou. "The Impact of New Member States on EU Environmental Policy", Environmental Politics 5(no.2, 1996):339. (v7,#4)

Andersen, Svend, "Global Ethics and Salvation," in Brümmer, Vincent and Marcel Sarot, eds., A Dialogue of Social Science and Religion (Kampen, The Netherlands: Kok Pharos Publishing House), pp. 133-143. "It is not legitimate to make direct links between the global problems and Biblical concepts like salvation" (p. 138). "The concept of salvation is not a part of global ethics: salvation is not a state on this earth which human beings can bring about. But the language of salvation is connected with Christian ethics and accordingly can have bearings on the efforts of solving the global problems. ... It is part of Christian ethics that all human beings should be treated as equals, so that justice is a universal idea. ... It is part of Christian ethics that we are responsible for nonhuman nature which is delivered into our hands" (pp. 142-143). Andersen teaches in the theology faculty at the University of Aarhus, Denmark. (v7,#2)


Anderson, Brent C., "Valuation of Environmentally Impaired Properties," *Natural Resources & Environment* 15(no.2, Fall 2000):100-. (EE v.12,#1)


Anderson, Christopher B., Gene E. Likens, Ricardo Rozzi, Julio R. Gutiérrez, Juan J. Armesto, and Alexandria Poole. "Integrating Science and Society through Long-Term Socio-Ecological Research." *Environmental Ethics* 30(2008):295-312. Long-term ecological research (LTER), addressing problems that encompass decadal or longer time frames, began as a formal term and program in the United States in 1980. While long-term ecological studies and observation began as early as the 1400s and 1800s in Asia and Europe, respectively, the long-term approach was not formalized until the establishment of the U.S. long-term ecological research programs. These programs permitted ecosystem-level experiments and cross-site comparisons that led to insights into the biosphere's structure and function. The holistic ecosystem approach of this initiative also allowed the incorporation of the human-dimension of ecology and recently has given rise to a new concept of long-term socio-ecological research (LTSER). Today, long-term ecological research programs exist in at least thirty-two countries (i.e., members of the International Long-Term Ecological Research Network, ILTER). However, consolidation of the international network within the long-term socio-ecological research paradigm still requires: (1) inclusion of certain remote regions of the world, such as southwestern South America, that are still poorly represented; (2) modifications of the type of research conducted, such as integrating social and natural sciences with the humanities and ethics; and (3) the incorporation of findings and results into broader social and political processes. In this context, a nascent long-term socio-ecological research network in Chile, which extends over the longest latitudinal range of temperate forest in the Southern Hemisphere, adds a new remote region to international long-term ecological research previously overlooked. In addition, collaboration with the University of North Texas and other international partners helps to further develop an interdisciplinary approach for the integration of the ecological sciences and environmental philosophy together with traditional ecological knowledge, informal and formal education, policy, the humanities, socio-political processes, and biocultural conservation. (EE)

Frodeman, Robert. "Philosophy Unbound: *Environmental Ethics* at the End of the Earth." *Environmental Ethics* 30(2008):313-324. Environmental challenges such as those facing the Cape Horn region of Chile exceed the competency of any disciplinary framework. Interdisciplinary approaches to knowledge combining the expertise of several disciplines as well as the trans-disciplinary perspectives of the public and private sectors require a unifying element that helps integrate such disparate perspectives. The field of philosophy, which traditionally has offered a view of the whole of knowledge, can serve in this role again, if philosophers are willing to embrace a de-disciplined expression of philosophy. (EE)

Rozzi, Ricardo, Ximena Arango, Francisca Massardo, Christopher Anderson, Kurt Heidinger,
and Kelli Moses. "Field Environmental Philosophy and Biocultural Conservation: The Omora Ethnobotanical Park Educational Program." *Environmental Ethics* 30(2008):325-336. Habitats (where we live), habits (how we live), and inhabitants (who we are) constitute an ecosystem unit. The biosphere is composed of a reticulate mosaic of these habitat-habit-inhabitant units, where humans (with their indigenous languages, ecological knowledge, and practices) have coevolved. Today, these diverse ecosystem units are being violently destroyed by the imposition of a single global colonial cultural model. In Cape Horn at the southern end of the Americas, educators, authorities, and decision makers do not know about the native habitats, language, and flora, and do not distinguish between Cape Horn's flora and the flora that grows in other parts of the country or the world. In contrast, indigenous people and old residents have a detailed knowledge, but they do not participate in education, and decision making. It is not Homo sapiens in general, but bioculturally biased educators, authorities, and decision makers who need to be transformed into (educated and responsible) members and citizen of biocultural communities. The Omora Ethnobotanical Park educational program was launched to contribute to a biocultural citizenship involving three critical steps: (1) the disclosing of biocultural diversity with a fine filter approach that permits understanding of the cultural and ecological diversity hidden by general universal labels; (2) direct face-to-face encounters with human and nonhuman co-inhabitants; and (3) actions for protection of habitats and implementation of interpretative spaces that facilitate direct encounters and conservation of biocultural diversity. These steps have been implemented at local and regional scales through the creation of the Omora Ethnobotanical Park and the UNESCO Cape Horn Biosphere Reserve. (EE)

Anderson, Dana. "Ethical Sight." *Environmental Ethics* 29(2007):113-130. Unconsidered visual acts carry with them embedded presuppositions that arise with the speed of thought. The mind's virtually instantaneous labeling of objects perceived forces subconscious (though learned) categorization that infects the results obtained from acts seeing acts. Chief among these biased results is a presumed divide between self and other that is both ecologically false and philosophically dangerous. (EE)


Anderson, EN, "Tropical Forest Game Conservation," *Conservation Biology* 15(no.3, 2001):791-
Anderson, J. W., "U. S. Has No Role in U. N. Treaty Process; Senate Reluctant to Ratify," Resources (Resources for the Future), Issue 148, Summer 2002, pp. 12-16. Thirteen global environmental treaties have gone into force in the last three decades, but the United States is party to only half of them. The Senate's great reluctance to ratify loosely worded treaties, such as the Kyoto Protocol, has meant the United States has no role in their implementation. One reason the Senate is reluctant to ratify is that the United States takes these treaties more seriously than do other nations. Elsewhere the treaties, vaguely worded, are loosely enforced. In the United States treaties become U.S. law, and the nature of the legal system, including lawsuits by environmentalists, would force the U.S. government to live up to its treaty commitments more rigorously than other countries might. Elsewhere, especially in developing countries, these treaties mostly gather dust on the desks of government officials. Thoughtful article. Anderson is a journalist in residence at Resources for the Future, Washington.


Anderson, James C. "Moral Planes and Intrinsic Values." Environmental Ethics 13(1991):49-58. In his book, Earth and Other Ethics, Christopher Stone attempts to account for the moral dimension of our lives insofar as it extends to nonhuman animals, plants, species, ecosystems, and even inanimate objects. In his effort to do this, he introduces a technical notion, the moral plane. Moral planes are defined both by the ontological commitments they make and by the governance rules (moral maxims) that pertain to the sorts of entities included in the plane. By introducing these planes, Stone is left with a set of problems. (1) Do the planes provide anything more objective than a set of alternative ways of looking at moral problems? (2) How can one resolve apparent conflicts between the recommendations forthcoming from distinct planes? (3) Why do certain entities constitute moral planes; and how do we decide which planes to "buy into?" Stone's answers to these questions endorse a series of concessions to moral relativism. In this paper I outline an alternative to Stone's moral planes which, while sympathetic to his ethical concerns, comes down squarely on the side of moral realism. Anderson is in the department of philosophy, University of Wisconsin-Madison, Madison, WI. (EE)

Anderson, James C., "Species Equality and the Foundations of Moral Theory." Environmental Values Vol.2 No.4(1993):347-366. ABSTRACT: The paper discusses various concepts of 'species equality' and 'species superiority' and the assumptions concerning intrinsic value on which they depend. I investigate what philosophers from the traditional deontological (Taylor and Lombardi) and utilitarian (Singer and Attfield) perspectives have meant by their claims for species equality. I attempt to provide a framework of intrinsic values that justifies one sense in which members of a species can be said to be superior to members of another species.

KEYWORDS: Equality, superiority, intrinsic values. Department of Philosophy, University of Wisconsin-Madison, Madison, Wisconsin 53706, USA.

Anderson, Jay A., "A Conceptual Framework for Evaluating and Quantifying Naturalness," Conservation Biology, vol. 5, no. 3, September 1991. "Naturalness is a scientific concept that can be evaluated and quantified. Intactness or integrity of ecosystems can be defined and assessed in similar ways. Three indices of naturalness are proposed: 1) the degree to which the
system would change if humans were removed, 2) the amount of cultural energy required to maintain the functioning of the system as it currently exists, and 3) the complement of native species currently in an area compared to the suite of species in the area prior to settlement. These indices are complementary and provide a conceptual framework for evaluating naturalness. The latter two can be quantified. Anderson is in the Department of Biological Sciences, Idaho State University, Pocatello. (v2,#2) With reply, Götmark, Frank, "Naturalness as an Evaluation Criterion in Nature Conservation: A Response to Anderson," Conservation Biology 6 (1992):455-458. And further reply, Anderson, Jay E., "Reply to Götmark," Conservation Biology 6(1992):459-460.


Anderson, Johan, Vadnjal, Dan, and Uhlin, Hanz-Erik, "Moral Dimensions of the WTA-WTP Disparity: An Experimental Examination," Ecological Economics 32(2000):153-162. Economists puzzle over the fact that in willingness-to-pay (WTP) versus willingness-to-accept payment (WTA) surveys regarding environmental goods, in theory there should be no difference between WTP and WTA. But in empirical studies WTA exceeds WTP; these authors conduct surveys that lead them to conclude that the valuation disparity increases with a corresponding increase in the sense of moral responsibility at stake. The authors are in the Department of Economics, Swedish University of Agricultural Sciences, Uppsala.


Anderson, Stephen R., Doctor Dolittle's Delusion: Animals and the Uniqueness of Human Language. New Haven: Yale University Press, 2005. Animals communicate and have many remarkable skills, memory, and can learn somewhat complicated procedures. They can link symbols to objects, as a red button to a banana. But they do not have language. The have no syntax; they have no reflective ideas communicated in language. So if kindly John Doolittle of Puddleby-on-the-Marsh was hearing voices, they weren't coming from Jip the dog or Gub-Gub
the pig. Anderson is in linguistics and psychology at Yale University. (v.14, #4)


Anderson, Terry L., Hill, Peter J., eds. Wildlife in the Marketplace. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1995. 208 pp. $22.95 paper, $57.50 cloth. Economists and wildlife experts challenge the prevailing idea that wildlife and markets are inimical to one another, arguing that markets can play an important role in preserving animal species and their habitat. (v8,#2)

Anderson, Terry L., Hill, Peter, J., eds. Environmental Federalism. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1997. 225 pp. $22.95 paper, $57.50 cloth. The contributors provide a wide variety of strategies to challenge what they view as Washington's unsophisticated, ineffective, and harmful approaches. They provide a general framework for how states can regain control of their environmental destiny. (v8,#2)


Anderson, Terry L., Leal, Donald R., Enviro-Capitalists: Doing Good While Doing Well. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1997. 200 pp. $16.95 paper, $52.50 cloth. Demonstrating why Americans should turn to private entrepreneurs rather than the federal government to guarantee the protection and improvement of environmental quality, the authors document numerous examples of how entrepreneurs have satisfied the growing demand for environmental quality. (v8,#2)

Anderson, Warwick, "A New Approach to Regulating the Use of Animals in Science", Bioethics 4(1990):45-54. There is now a growing acceptance amongst scientists world-wide that rational and effective guidelines are needed for experimental work involving animals. Ideally, these rules in each country should be based on a set of internationally accepted general principles but at the same time reflect local cultural, scientific and legal conditions. In Australia, the national Code of Practice for the scientific use of animals has just been revised. The development of the Australian Code has been driven largely by the research community itself, and partly because of this the Code has unique features. Amongst the most important features is the requirement that an animal experimentation ethics committee should approve experiments only if the worth of the experiment outweighs the adverse effects on the animals. The paper discusses animal experimental ethics committees and other features of the Code.

Anderson, William, Green Man: The Archtype of our Oneness with the Earth (San Francisco: Harper and Row, 1990). A search for "green" in architecture and art of the past. Harper is selling this book with a wraparound that says: "To keep our Earth green, Harper, San Francisco, will plant two trees in the Rainforest for every one used in the publication of this book." (v2,#1)

Andersson, Meike; Gradstein, S., "Impact of management intensity on non-vascular epiphyte diversity in cacao plantations in western Ecuador," Biodiversity and Conservation 14(no.5, May
Andersson, Petra. *Humanity and Nature: Towards a Consistent Holistic Environmental Ethics*. Göteborg, Sweden: Acta Philosophica Gothoburgensia, no 20, 2007. Andersson completed and has now published this Ph.D. thesis in the Department of Philosophy, Göteborg University (Box 200, SE-405 30 Göteborg). Within the theoretical framework of holistic environmental ethics, moral status is ascribed to biotic wholes, such as ecosystems, species and landscapes. The purpose of holistic environmental ethics is not entirely clear, since the framework contains conflicting ideas about which properties of the biotic whole contribute to moral status, and to which moral reasons this moral status gives rise. The aim of this thesis is to investigate the prospects of an internally consistent version of holistic environmental ethics. On the basis of an initial analysis, the tensions are organized in three themes: human-centered, integrity-centered, and nature-centered ethics and are then analyzed with regard the claim that naturalness is an important contributor to the moral status of biotic wholes. If naturalness is seen as a binary property, it creates a grave incoherence. If naturalness is instead understood in more nuanced terms (so that naturalness can be a question of different degrees or senses), some of these problems become less serious, but new problems emerge. In particular, the question whether a version of holistic environmental ethics that incorporates nature-centeredness may allow human beings a reasonable space remains. If nature-centeredness is rejected, however, several internal tensions within a holistic environmental ethics may be resolved. It is therefore argued that a plausible ethics should abandon the nature-centered theme, i.e., reject the idea of Anatural nature@ as being morally significant in itself. The idea that integrity gives rise to moral status of a biotic whole is more fruitful, and can also be combined with most of the particular opinions that might motivate nature-centeredness. Integrity-centeredness may also be consistently combined with human-centeredness, and a holistic environmental ethic may thus provide reasonable room for human beings in nature. Keywords include biotic communities, biotic wholes, denaturalization, ecocentrism, environmental ethics, holism, human membership in biotic communities, moral status, naturalness, nature, nature knows best, and the end of nature.


Andreas, Peter. "Border Troubles: Free Trade, Immigration and Cheap Labour." *The Ecologist* 24 (no. 4, July 1994): 230- . As millions of people are uprooted by the increasing integration of the global economy, pressure has mounted on governments to impose more restrictive
immigration controls. But attempting to stop people moving around while encouraging the mobility of everything else is a recipe for policy frustration. Illegal immigration from Mexico into the US illustrates the problems. (v6,#1)


Andrews, John, "Weak Panpsychism and Environmental Ethics," Environmental Values 7(1998):381-396. Weak panpsychism, the view that mindlike qualities are widespread in nature, has recently been argued for by the prominent ecofeminist Val Plumwood and has been used by her to ground an ethic of respect for nature. This ethic advocates a principle of respect for difference, the rejection of moral hierarchy and the inclusion of plants, mountains, rivers and ecosystems within the moral community. I argue that weak panpsychism cannot, convincingly, justify the rejection of moral hierarchy, as it is compatible with it. Also the intentional criterion of mind, employed by weak panpsychism, which includes teleology, has the counter-intuitive implication of giving machines moral status. I cast doubt on the claims that (i) intentionality is a necessary condition for moral status and that (ii) it is sufficient for the ascription of agency. It is suggested that any account of intentionality that allows it to be predicated of mountains, rivers etc. would be widely, and correctly regarded as a reductio of that account. Finally an aesthetic reinterpretation of weak panpsychism is offered. KEYWORDS: weak panpsychism, assimilationism, dualism, intentionality, agency. John Andrews is at the University of Reading, UK. (EV)


Andrews, Richard N. L., Managing the Environment, Managing Ourselves: A History of American Environmental Policy. New Haven: Yale University Press, 1999. 419 pages. $ 30.00 paper. American environmental policy is not just a product of late twentieth century concerns, but is rooted in America's nearly four hundred year history of government actions to promote or control human uses of nature. The interplay between environmental policies and broader patterns of economic, social, and political development, showing how present environmental policy emerged from earlier patterns and precedents. Andrews teaches environmental policy at the University of North Carolina, Chapel Hill. (v.9,#4)

actions to promote or control human uses of nature. That rich history affects environmental issues today and in the future. Andrews is professor of environmental policy in the Department of Environmental Sciences and Engineering, University of North Carolina at Chapel Hill. (v.10,#1)


Angermeier, Paul L., "Does Biodiversity Include Artificial Diversity?" Conservation Biology 8(1994):600-602. (v.7,#2)

Angermeier, Paul L., "The Natural Imperative for Biological Conservation," Conservation Biology 14 (No. 2, 2000 Apr 01): 373-. (v.11,#4)


Mandrills threatened by logging and commercial hunting. A type of monkey called Mandrills form huge societies sometimes numbering over 1000 individuals. These groupings are extremely cohesive and persistent and they consist almost exclusively of females and their young. Males, who are three times larger than females (three feet tall and weighing about 90 pounds versus 25 pounds for females), live alone and only interact with the group when the females are in estrus. The recent rise in the "bush meat trade" — the hunting of wild animals in general and primates in particular — is a threat to Mandrills because they travel long distances in huge numbers making them especially vulnerable to commercial hunters who use the expanding network of logging roads to penetrate once inaccessible forests. "Some conservation organizations now rank the bush meat trade as the single greatest threat to primates and other wildlife, outstripping in severity even the familiar ecovillain, habitat loss." Conservationists are trying to add "sensitivity to wildlife" to the criteria logging companies must meet to have their wood certified as sustainable, thus forcing timber companies to keep commercial hunters off their logging roads and away from threatened species. Home Depot, a chain of home-improvement stores, has announced it will buy sustainable wood "whenever possible." (v.11,#2)


Animal Conservation: A Journal of Ecology, Evolution, and Genetics, a new journal, calls for papers. The journal is published for the Zoological Society of London. There are several editors: in the U.K.: Dr. Michael W. Bruford, Institute of Zoology, Zoological Society of London, London NW1 4RY, UK., In the U.S.: Dr. John L. Gittleman, Department of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN 37996. (v.8,#2)

Animal Issues is a new journal aimed to investigate philosophical and ethical issues related to human/animal interactions. Papers are invited on any topics within this general area. Word length should be 4,000-10,000 words and papers should preferably be sent on a Mac disc by e-mail to the editor, or if this is not possible, a hard copy should be sent to the editor. The founding editor is Denise Russell, Department of General Philosophy, University of Sydney, N.S.W. 2006, Australia, e-mail: Denise.Russell@philosophy.su.edu.au. Co-editors: L. Birke, Institute for Women's Studies, University of Lancaster, United Kingdom; B. Forsman,
Vol. 1, No. 1, 1997, contained the following articles:
Freya Mathews, "Living with Animals"
Val Plumwood, "Babe: The Tale of the Speaking Meat," Part 1
Lynda Birke, "Science and Animals, or, Why Cyril Won't Win the Nobel Prize" Emma Munro, "Speciesism and Sexism"

Vol. 1, No. 2 1997, contained the following articles:
Andrew Brennan, "Ethics, Conflict and Animal Research"
Birgitta Forsman, "Two Different Approaches to Gene Technology in Animals" Val Plumwood, "Babe: The Tale of the Speaking Meat," Part II
Lynda Birke and Mike Michael, "Hybrids, Rights and Their Proliferation"

Subscriptions (1998-99 rates): Australia and New Zealand: A$12 per issue (including postage). Other countries: A$20 per issue (including postage). Send payment with your name and address to: Dr. Denise Russell, The Editor, Animal Issues, address above. (v9,#1)

Animal Issues has now published three volumes. Sample articles:
--Murphy, Elizabeth, "In What Respects, If Any, Should the Primates Be Equal?" vol. 3, no. 1, 1999.

The editor is Denise Russell, Department of General Philosophy, University of Sydney, N.S.W., Australia 2008. E-mail: Denise.Russell@philosophy.usyd.edu.au (v10,#2)

Animal Issues is a new journal, starting spring 1997. Denise Russell, Department of General Philosophy, University of Sydney, Sydney, N.S.W. is the editor. (v8,#1)

Animal Law is the only law review exclusively devoted to animals and the law. It is in its second issue, is published by the Northwestern (Oregon) School of Law, and is sponsored by the Animal Legal Defense Fund. Address: Animal Law, 10015 S.W. Terwilliger Blvd., Portland, Oregon 97219 USA. Phone: 503/768-6798. (v7, #3)


Anker, Peder, The Political Limits of Deep Ecology. M.A. dissertation (in Norwegian), in the
Department of Philosophy, University of Oslo. The argument is that deep ecology provides insufficient guidance for the solution of political problems requiring compromises in setting standards that must do justice to both sides, with particular reference to pollution issues. Other philosophers, such as Habermas and Rawls, although operating from an anthropocentric position, have important insights about justice that deep ecology lacks and needs. Address: Peder Anker, Erling Skjalgsongsst 1b, 0267 Oslo. (Norway)


Annals of Earth is a periodical published by the Center for the Protection and Restoration of Waters at Ocean Arks International and the Lindisfarne Association. Ocean Arks was incorporated in 1982 to disseminate the ideas and practice of ecological sustainability throughout the world. It has recently established a Center for the Protection and Restoration of Waters. Lindisfarne, founded in 1972, is an association of individuals and groups dedicated to fostering the emergence of a new global culture. Their objective is to "restore the land, protect the seas, and inform the Earth's stewards." Annals of Earth can be obtained for a contribution of $ 15.00 annually. Address: One Locust Street, Falmouth, MA 02540. John Todd is president of Ocean Arks International and Nancy Jack Todd is vice-president and editor of Annals. (v1,#3)

Anoliefo, G.O., Isikhuemhen, O.S., and Ochije, N.R., "Environmental implications of the erosion of cultural taboo practices in Awka-South local government area of Anambra State, Nigeria: 1. Forests, trees, and water resource preservation," Journal of Agricultural and Environmental Ethics 16(2003):281-296. Cultural taboos and their sanctions have helped to check abuse of the environment at least among the local people. The disregard for these traditional checks and balances especially among Christians has adversely affected their enforcement at this time. The "god" of the shrine in Obunagu village was much revered until the advent of Christianity. This religion has had an eroding effect on the taboos, which were put in place to protect their forests and streams. The abandonment of traditional cultural practices is doing harm that goes beyond the abrogation of traditional cultural practices to serious threat to natural environmental structures. KEY WORDS: cultural taboos, forest, shrines, sustainability, traditional practices, trees. (JAEE)

Anoliefo, G.O., O.S. Isikhuemhen and E.C. Okolo. "Traditional Coping Mechanism and Environmental Sustainability Strategies in Nnewi, Nigeria," Journal of Agricultural and Environmental Ethics 11(1999):101-109. Nnewi is situated some 30 kilometres South East of Onitsha in Anamba State in the southeastern part of Nigeria. This highly commercial town has undergone rapid urbanisation and industrialisation within the past two decades, since the end of the 1967-1970 Nigerian civil war. The Igbo community of the study area had traditionally employed bioconversion methods and other indigenous technology to process or recycle bio and non-degradable wastes. Industrialisation has enjoyed priority status in this locality as a requirement for modernisation and economic progress. The rapid urbanisation, aggressive
industrialisation, and the attendant uncontrolled population growth have had a deleterious impact on the environment. There is now a wide range of industrial wastes that are released daily into the environment. Effects of these activities on the socio-cultural practices of the people, plant genetic resources and the environment are highlighted. In addition to palliative measures suggested here, a call is made to revisit the successful indigenous waste treatment and management technology formerly practised by the Igbo community. The importance of combining modern biotechnological approaches with the indigenous technology, norms and practices of Nnewi people to effect suitable waste treatment and management, as well as improving the living habits and the education of the people about their environment, is recommended. (JAEE)

Ansink, Erik, Lars Hein and Knut Per Hasund, ATo Value Functions or Services? An Analysis of Ecosystem Valuation Approaches, @ Environmental Values 17(2008):489-503. Monetary valuation of ecosystem services is a widely used approach to quantify the benefits supplied by the natural environment to society. An alternative approach is the monetary valuation of ecosystem functions, which is defined as the capacity of the ecosystem to supply services. Using two European case-study areas, this paper explores the relative advantages of the two valuation approaches. This is done using a conceptual analysis, a qualitative application, and an overall comparison of both approaches. It is concluded that both approaches can be defended on theoretical grounds, and - if properly applied - will provide the same value estimates. However, valuation of ecosystem services is preferred from a practical point of view. Because there is no one-to-one match between functions and services, researchers should be consistent in their valuation approach. To avoid overlooking or overlapping of values, valuation should either be solely based on functions, or solely based on services.

Anthologies, Environmental Ethics: (See separate entries for more detail.)
--Abel, Donald C., ed., Customized environmental ethics anthology. McGraw Hill electronic database with which instructors can customize their own anthology. See bibliographic entry. Website: http://mhhe.com/primis/philo


Older:


Anthony, Brian Patrick, "Nature's Cathedral: The Union of Theology and Ecology in the Writings of John Muir," *Ecotheology* 7 (1, July 2002):74-80. John Muir has strongly impacted the environmental movement since he penned his works during the nineteenth and early twentieth centuries. While the Scottish-born naturalist is well-known for his rugged individualism, the driving force behind his thought and effort was his connection with the Divine. Muir inherited a seeking soul from his devoutly Reformist father, Daniel. The younger Muir, however, would find his principal inspiration in the gospel of nature. A foray into industry convinced Muir that the stain of civilisation blinds us to this original scripture. Muir spoke of a distinct correlation between humanity's spiritual ills and the destruction of the natural world, and suggested an extension of the Christian ethic to all creatures. In his various travelogues, he offers an illuminating vision of the God of nature, and humanity's position in relation to both Creator and creation.


Anthony, Raymond, "Risk Communication, Value Judgments, and the Public-Policy Maker Relationship in a Climate of Public Sensitivity toward Animals: Revisiting Britain's Foot and Mouth Crisis," *Journal of Agricultural and Environmental Ethics* 17(2004):363-383. This paper offers some suggestions on, and encouragement for, how to be better at risk communication in times of agricultural crisis. During the foot and mouth epizootic, the British public, having no precedent to deal with such a rapid and widespread epizootic, no existing rules or conventions, and no social or political consensus, was forced to confront the facts of a perceived "economic disease." Foot and mouth appeared as an economic disease because the major push to eradicate it was motivated exclusively by trade and economic reasons and not because of threats it posed to the lives of human beings and livestock. The British public deferred responsibility to their elected officials for a speedy end to this non-life threatening viral epizootic. The latter, however, did not have a contingency plan in place to tackle such an extensive outbreak. The appeal to an existing policy, i.e., mass eradication, as the exclusive strategy of containment was a difficult pill for the public to swallow well before the end of the 226-day ordeal.

Public moral uneasiness during the crisis, while perhaps symbolic of growing discontent with an already fractured relationship with farmed animals and the state of animal farming today, arguably, also reflected deep disappointment in government agents to recognize inherently and conditionally normative assumptions in their argument as well as recognize their narrow conception of risk. Furthermore, broader stakeholder participation was clearly missing from the outset, especially with respect to the issue of vaccination. A greater appreciation for two-way risk communication is suggested for science-based public policy in agriculture, followed by suggestions on how to be more vigilant in the future. Keywords: agricultural ethics, animal agriculture, foot and mouth disease, risk. The author is in the Department of Philosophy and Religious Studies, Iowa State University, Ames, Iowa. (JAEE)
Antrop, M., "Changing Patterns In The Urbanized Countryside Of Western Europe," *Landscape Ecology* 15 (No. 3, Apr 01 2000): 257-. (v.11,#2)


Apffel-Marglin, Frederique, "From Fieldwork to Mutual Learning: Working with PRATEC," *Environmental Values* 11(2002):345-367. This paper places the work of a Peruvian NGO (PRATEC), with which the author collaborates, within a broad context of the theory of knowledge. The three members of PRATEC were engaged in different aspects of the development enterprise. Out of their perceived failure of that enterprise, they deprofessionalised themselves and founded this NGO. The author argues that within the professional academic disciplines it is impossible to produce a knowledge that can contribute to the procreative concerns of communities, that is, their concerns about their continuity and well-being. She does a brief historical review of the emergence of the modern university in the nineteenth century and the hidden political agenda of the new so called value-free knowledge it institutionalised. She ends up advocating a rejection of the double participation necessitated by professional academic disciplines. (EV)


Aplet, Gregory H., "On the Nature of Wilderness: Exploring what Wilderness Really Protects," *Denver University Law Review* 76(1999):347-367. Wilderness is neither simply an idea nor a place. It is a place where an idea is clearly expressed. ... In an effort to bridge the chasm that has developed between the critics and the defenders of wilderness, this Essay examines the qualities of a place that confer wilderness and explores some of the implications of treating wilderness as a quality best expressed in the places we call wilderness, but also infused in special places closer to home" (p. 349). "Wilderness is criticized for separating people from nature, for ignoring aboriginal people, and for holding nature static, even as it is revered as a place. The representation of wilderness described here as the end of two-dimensional continuum of wilderness
defined by naturalness and freedom from human control offers a way out of this dilemma. By describing wildness as a continuum, we acknowledge the wildness that is all around us even as we celebrate the places at the end of the continuum" (p. 366). Aplet is a forest ecologist with The Wilderness Society. (v.12,#4)


Aplin, Graeme, Mitchell, Peter, Cleugh, Helen, Pitman, Andrew, Rich, David. _Global Environmental Crises: An Australian Perspective_. New York: Oxford University Press, 1995. 344pp. $26.95. A distinctly Australian perspective on environmental priorities. In Australia, these are in many ways different from those in other parts of the world. (v8,#1)

Appleby, Michael C., "Sustainable Agriculture is Humane, Humane Agriculture is Sustainable," _Journal of Agricultural and Environmental Ethics_ 18(2005):293-303. Procedures that increase the sustainability of agriculture often result in animals being treated more humanely: both livestock in animal and mixed farming and wildlife in arable farming. Equally, procedures ensuring humane treatment of farm animals often increase sustainability, for example in disease control and manure management. This overlap between sustainability and humaneness is not coincidental. Both approaches can be said to be animal centered, to be based on the fact that animal production is primarily a biological process. Proponents of both will gain from recognition of commonality and development of cooperation. A collaborative approach to humane sustainable agriculture will benefit animals, people, and the environment. Keywords agriculture - animal production - animal welfare - humaneness - livestock - sustainability. Appleby is with the Humane Society of the United States, Washington, DC. (JAEE)

Appleby, Michael C. et al (six others), "What price cheap food?" _Journal of Agricultural and Environmental Ethics_ 16(2003):395-408. Report of a meeting that gathered many of UK senior animal scientists with representatives of the farming industry, consumer groups, animal welfare groups, and environmentalists. There was strong consensus that the current economic structure of agriculture cannot adequately address major issues of concern to society: farm incomes, food security and safety, the needs of developing countries, animal welfare, and the environment. These issues must be addressed by a combination of legislation, restructuring of the market, and use of public funds. KEY WORDS: agriculture, animal welfare, development, economics, environment, food, sustainability. (JAEE)


Appleton, Jay, "Nature as Honorary Art," _Environmental Values_ 7(1998): 255-266. This paper
addresses the apparent difficulty experienced by philosophers in applying the methodology of art criticism to the aesthetics of nature and uses the idea of 'narrative' to explore it. A short poem is chosen which recounts the 'narrative' of a simple natural process - the passage of day into night - and this is followed by a simplified critique illustrating how the poem invites questions relating to style, technique, subject, etc., leading to the query whether the art form (poem) can be dispensed with and the subject (nature) be left to tell its own story, using the 'language' of symbolism. The interface between art and science is reviewed particularly in the light of the ideas of John Dewey and what has happened since. The 'symbolism of environmental opportunity' is proposed as the key to crossing the arts/science boundary, and the question is raised whether the distinctiveness of nature is of paramount importance in this context. Various grounds for scepticism are examined, e.g. the danger of drawing inferences about human interaction with nature from the behaviour of other species. KEYWORDS: Nature, art, aesthetics, symbolism, prospect/refuge theory. Jay Appleton is at Cottingham, East Yorkshire, UK. (EV)


Arai, A. Bruce "Science and Culture in the Environmental State: The Case of Reactor Layups at Ontario Hydro", Organization and Environment 14 (No. 4, December 2001) pp.409-24. The widespread concern about the declining state of our physical environment is often accompanied by frustration about what to do to prevent or even reverse such deterioration. In the past, policy makers, legislators, and the general public have usually turned to scientists and scientific knowledge for answers. But recently, theorists and others have re-emphasized the importance of culture in understanding the environment. In this article, this culturalist critique of scientific knowledge is discussed and is then related to the decision by Ontario Hydro to lay up seven of its nuclear reactors. This situation is used to illustrate the continuing relevance of scientific knowledge for addressing environmental concerns. Arai is associate professor in the Department of Sociology and Anthropology at Wilfred Laurier University, Waterloo, Ontario. (v.13,#2)


Arbor, J.L., "Animal Chauvinism, Plant-Regarding Ethics and the Torture of Trees", Australasian Journal of Philosophy, 64, (1986): 335-39. The extension of moral considerability to "higher" animals on the basis of properties possessed by both animals and humans excludes many species of animals and non-animate beings. The author claims that the exclusion of "lower" animals from the class marked out for privileged treatment by Western ethics together with the assumption that living inanimate beings can safely be excluded deserves to be queried. It is not suggested that the value of human and animal states of consciousness be denied, however, a plant-regarding ethic would reject the claim that in all cases of conflict between the interests of animals and plants the former always prevails. According to the author "[a] plant-regarding ethic requires the rooting out of all ... forms of animal chauvinism and a branching forth of new sentiments and new systems of thought."

pp. $63.95. A critique of the current approaches to conventional urban policies which, the author claims, lack long-term vision and are limited to technological interventions for short-term improvements, without taking into consideration the conditions and constraints of town planning.

Archhibugi, Franco. The Ecological City and City Effect. Brookfield, VT: Ashgate, 1998. 252 pp. $63.95. A critique of the current approaches to conventional urban policies which, the author claims, lack long-term vision and are limited to technological interventions for short-term improvements, without taking into consideration the conditions and constraints of town planning.


Ariansen, Per, "Anthropocentrism with a Human Face" draft article, in English. Ariansen proposes an anthropocentric environmental ethic that gives due room for the moral intuitions that it is blameworthy to mistreat animals and even, in some cases, to destroy inanimate objects, though direct moral obligations are toward humans and human projects only. Ariansen holds that we could not act morally directly toward plants or animals, even if we very strongly wanted to. Still, a deep respect for the suffering of others imposes upon humans a limited prime facie commitment also to animal welfare, and even to the wanton destruction of the environment. Copies on request from the author: Filosofisk institutt, P. A. Munchs hus, Postboks 1020, Blindern, 0315 Oslo, Norway. (v5,#2) (Finland)

Ariansen, Per, "Anthropocentrism with a Human Face," Opuscula (published by the Examen Philosophicum Section of the Department of Philosophy, University of Oslo), Fall 1994. In English. Ariansen argues for an anthropocentric environmental ethic that finds it morally blameworthy to mistreat animals, although direct moral obligations are towards humans. We could not act morally directly towards plants or animals even if we very strongly wanted to. Sentient animals are, as far as we know, in a position where they are unable to see wilfully inflicted pain as different from any other occurrence of pain. It is therefore simply impossible to offer ethics to animals. They will not be able to understand what they are being offered. It is impossible to morally offend an animal, though clearly it is possible to inflict pain on them and in manners that morally offend humans.

Duties toward animals are in reality duties towards ourselves, though the way this is so is often misunderstood. We ought to have respect for the pain of others even if it is clear that the patient will never discover that the pain or loss inflict had a human origin. The morally relevant relationship between humans and non-humans is essentially dependent upon the scheme of morality as it unfolds in inter-human society. Although this scheme centers around the autonomy of the moral agent, it nevertheless presupposes a respect for the suffering of others, since in a world without suffering, lying and cheating would have no moral significance. A deep respect for the suffering of others imposes on humans a limited prima facie commitment also to animal welfare. Some case can also be made that the destruction of non-sentient and non-animate nature, such as a crystal, can be analogously treated. Ariansen teaches philosophy at the University of Oslo and is the author of Miljofilosofi: En Innføring (Environmental Philosophy: An Introduction).

Ariansen also has two forthcoming papers: (1) "Sustainability, Morality and Future Generations," given at a conference in Kyoto, Japan, sponsored by the Future Generation Alliance Foundation and the Kyoto Forum. (2) "Beyond Parfit's Paradox," prepared for the
October 1994 conference, "Our Responsibilities toward Future Generations," held in Malta. Copies on request: Per Ariansen, Filosofisk Institutt, Universitetet i Oslo, Boks 1020, 0315 Blindern, Oslo, Norway. FAX: (+47) 22 85 75 51 (v5,#4)


Ariansen, Per and Jon Wetlesen, "Miljofilosofi (Environmental Philosophy)," in K. E. Johansen,
ed., Allmen inforing i etikk (Oslo: Cappelen, 1994). The authors are in philosophy at the University of Oslo. (Finland)


Ariansen, Per. "Sustainability, Morality and Future Generations." Future Generations Journal, No. 17 (1995/3) Valletta, Malta. A revision in Norwegian is Ariansen, Per, "Barekraftighet, moral og fremtidige generasjoner." Printed in W. Lafferty & O. Langhelle (red.), Berekraftig utvikling. Oslo: AdNotam, Gyldendal, 1995. An English translation of the revision will appear in 1997. In addition to bringing forward some aspects of Ariansen's brand of anthropocentrism, the article also addresses briefly the "Parfit paradox", suggesting that the hypothetical question posed to future generations, whether they would rather exchange their plight for never having been born, rests on the mistaken understanding that this question is analogous to other questions about the preference of one state over another. The question breaks an "existential syntax". The state of never having been born cannot be evaluated by those who actually were born. Ariansen is in philosophy at the University of Oslo. (v7,#4)


Arias-Maldonado, Manuel, AAn Imaginary Solution? The Green Defence of Deliberative Democracy,@ Environmental Values 16(2007): 233-252. As part of the recent rethinking of green politics, the construction of a green democracy has been subjected to increasing scrutiny. There is a growing consensus around deliberative democracy as the preferred model for the realisation of the green programme. As a result several arguments emerge when deliberative principles and procedures are to be justified from a green standpoint. This paper offers a critical assessment of the green case for deliberative democracy, showing that deliberation is being asked to deliver more than it is able to. However, it is suggested that the connection between sustainability, understood as a normative principle, and deliberative procedures may ultimately
offer the best grounds for such a defence. Arias-Maldonado is in political science, University of Malaga, Malaga, Spain.


Arler, Finn, "Justice in the Air: Energy Policy, Greenhouse Effect, and the Question of Global Justice," Human Ecology Review 2 (no. 1, winter/spring 1995):40-. The central ethical issues in reacting to the problem of an increasing greenhouse effect. Energy policy, dilemmas of justice, impartiality versus mutual advantage, ideal versus conditional justice, monological (ideal observer) versus procedural (participant parties) justice, membership and the concentric circle theory (increased obligations toward those nearest us), global partnership, criteria of justice (need, desert, entitlement, luck, means, abilities), principles versus judgment. The principles of equality, precaution, prevention, cost-effectiveness, responsibility, care, solidarity, self-determination, sovereignty, justice between generations. Cost-benefit analyses, the relevance of previous actions, justice across borders. Arler is with the Man and Nature, Humanities Research Center, Odense University, and was until recently in philosophy and human ecology, Aarhus University, Denmark. (v6,#4)

Arler, Finn, "Aspects of Landscape or Nature Quality," Landscape Ecology 15(2000):291-302. Landscape or nature quality has become a key concept in relation to nature policy and landscape planning. In the first part of the article it is argued that these qualities should not be conceived as mere expressions of private or subjective preferences. Even though there may not be any "objective" or "scientific" method dealing with them, they are still values which can be shared, reflected on, and discussed in a reasonable way. The connoisseurs are introduced as experienced persons, who are particularly capable of identifying different kinds of qualities, bridge builders between cognition and evaluation. The second part of the article deals with four central sets of landscape or nature qualities: qualities related to species diversity, qualities related to "the atmospheres" and characters of places, pictorial qualities, and qualities related to narrativity. It is argued that experience of these and similar qualities are an important part of human flourishing, and that they should therefore all have a prominent place in landscape planning. Arler is in philosophy, Arhus University, Denmark.

Arler, Finn, "Energy Policy, Greenhouse-effect and Global Justice." Surveys the position of Denmark on CO₂ emissions, compares this with that of the United States and other countries, considers the rights of developing countries to energy use, recalls statements from the UNCED Rio de Janeiro conference, and asks what principles of justice might be used to set policy for energy in view of the greenhouse effect. Copies from Finn Arler, Department of Philosophy,

--Agger, Peder, and Sandoe, Peter, "The Use of 'Red Lists' as an Indicator of Biodiversity," pp. 61-70.
--Sorensen, Merete, "Increase of Biodiversity Through Biotechnology: Genetic Pollution or Second Order Evolution," pp. 84-92.
--Zeitler, Ulli, "Global Solutions and Local Understanding: Conceptual and Perceptual Obstacles to Global Ethics and International Environmental Law," pp. 232-244. (v.9,#4)
criteria. This diversity leads us to the third question concerning the possibility of identifying an overall social ideal which can be used in cases where several different criteria may be useful. I shall discuss one such ideal in particular, namely the ideal of complex equality. In the concluding remarks it is argued that a distribution of emission quotas to countries in accordance with population size is a reasonable starting point for an equitable solution, although it involves various problems of application. Keywords: Climate change, greenhouse effect, equity, justice, global partnership, common concerns, distributive criteria, social ideals, complex equality.  Finn Arler is at the Department of Development and Planning, Division of Technology, Environment and Society, Aalborg University, Aalborg O, Denmark.  


Armstrong, Adrian, "Is God Green? Christian Contributions to the Environmental Debate,"

Armstrong-Buck, Susan. "Whitehead's Metaphysical System as a Foundation for Environmental Ethics." *Environmental Ethics* 8(1986):241-59. Environmental ethics would greatly benefit from an adequate metaphysical foundation. In an attempt to demonstrate the value of Whitehead's metaphysical system as such a foundation, I first discuss five central tenets of his thought. I then compare aspects of his philosophy with Peter Singer's utilitarianism, Tom Regan's rights theory, Aldo Leopold's land ethic, and Spinoza's system in order to indicate how a Whiteheadian approach can solve the difficulties of the other views as currently developed, and provide the basis for an environmental ethics which values individual entities in themselves and in their connectedness in a purposive natural order. Armstrong-Buck is in the department of philosophy, Humboldt State University, Arcata, CA. (EE)


Armstrong, Susan J. Review of Arran Gare. Incorporated: European Civilization and Environmental Destruction: (Bungendore, Australia, Eco-logical Press, 1993). (EV)


Armstrong, Susan J. and Botzler, Richard G. (eds.), Environmental Ethics: Divergence and Convergence, Third Edition. (New York: McGraw-Hill, 2003). This anthology is designed to help students develop their own environmental ethic, based on a sympathetic but critical look at all of the major contemporary approaches, including ecofeminism and multicultural perspectives. The anthology encourages students to incorporate moral, aesthetic, scientific, historical, political and economic perspectives in developing their environmental ethic. This third edition is 60% new, with expanded attention to application of theories, including biotechnology, and includes case studies.


by Jane Goodall, (22) ACulture and Conservation of Non-Humans with Reference to Whales and Dolphins@ by Hal Whitehead, Luke Rendell, Richard W. Osborne, and Bernd Wursig, (23) AInto the Brains of Whales@ by Mark Peter Simmons, (24) AWales as Persons@ by Paola Cavalieri, (25) AMeat-Eating@ by David DeGrazia, (26) AThinking like Animals@ by Temple Grandin, (27) AA Major Change@ by Temple Grandin, (28) AFood Prices and Animal Welfare@ by Michael C. Appleby, (29) AAnimal Agriculture: Myths and Facts@ by Animal Agriculture Alliance, (30) AThe Least Harm Principle May Require that Humans Consume a Diet Containing Large Herbivores, not a Vegan Diet@ by Steven L. Davis, (31) AThe Ethical Imperative to Control Pain and Suffering in Farm Animals@ by Bernard Rollin, (32) AThe Basic Argument for Vegetarianism@ by James Rachels, (33) AThe Rape of Animals, the Butchering of Women@ by Carol J. Adams, (34) AA Paradox of Ethic Vegetarianism: Unfairness to Women and Children@ by Kathryn Paxton George, (35) AJudaism@ by Norman Solomon, (36) AEnhancing the Divine Image@ by Rabbi Stephen Fuchs, (37) AThe Bible and Killing for Food@ by Andrew Linzey, (38) AIslam@ by Martin Forward and Mohamed Alam, (39) AThe Case for Animal Rights@ by Tom Regan, (40) AThe Ethics of Animal Research: What are the Prospects for Agreement??@ by David DeGrazia, (41) ADefending Animal Research: An International Perspective@ by Baruch A. Brody, (42) AWhoCor WhatCare the Rats (and Mice) in the Laboratory?@ by Lynda Birke, (43) AEthical Themes of National Regulations Governing Animal Experiments: An International Perspective@ by F. Barbara Orlans, (44) ASummary of Recommendations@ by Jonathan Balcombe, (45) AHuman Education: The role of Animal-based Learning@ by Andrew J. Petto and Karla D. Russell, (46) AEcological Ethics: Building a New Tool Kit for Ecologists and Biodiversity Managers@ by Ben A. Minteer and James P. Collins, (47) AEthics and Experimentation: Hard Choices for the Field Ornithologist@ by Stephen T. Emlen, (48) ASome Ethical Issues in Biotechnology Involving Animals@ by David Morton, (49) ACrossing Species Boundaries@ by Jason Scott Robert and Francoise Baylis, (50) AIn Defense of the Moral Relevance of Species Boundaries@ by Robert Streiffer, (51) AAnimal Genetic Manipulation: A Utilitarian Response@ by Kevin R. Smith, (52) AThe Inevitability of Animal Biotechnology? Ethics and Scientific Attitude@ by Jeffrey Burkhardt, (53) AOn Telos and Genetic Engineering@ by Bernard E. Rollin, (54) ABrave New Birds: The Use of >-Animal Integrity= in Animal Ethics@ by Bernice Bovenkerk, Frans W.A. Brom, and Babs J. van den Bergh, (55) ACloning Advances and Challenge for Conservation@ by Oliver A. Ryder, (56) ACreating Fido=s Twin: Can Pet Cloning be Ethically Justified??@ by Autumn Fiester, (57) AThe Philosophical Value of Wildlife@ by J. Baird Callicott, (58) AThe Ethic of Care and the Problem of Wild Animals@ by Grace Clement, (59) AGame and Wildlife Conservation@ by Aldo Leopold, (60) AThe Killing Game: An Ecofeminist Critique of Hunting@ by Marti Kheel, (61) AEnvironmental Ethics and Trophy Hunting@ by Alastair S. Gunn, (62) AExotic Species, Naturalisation, and Biological Nativism@ by Ned Hettinger, (63) ATo Eat the Laughing Animal@ by Dale Peterson, (64) AOrcas and Dolphins in Captivity@ by Randall L. Eaton, (65) AZoos and Eyes: Contesting Captivity and Seeking Successor Practices@ by Ralph Acampora, (66) AAgainst Zoos@ by Dale Jamieson, (67) AIn Defense of Zoos and Aquariums: The Ethical Basis for Keeping Wild Animals in Captivity@ by Michael Hutchings, Brandie Smith, and Ruth Allard, (68) AZoos and the Rights of Animals@ by Donald G. Lindburg, (69) AOpportunities Lost: Zoos and the Marsupial that Tried to be a Wolf@ by Chris Wemmer, (70) AAffection=s Claim@ by Konrad Lorenz, (71) ADogmatisms and Catechisms: Ethics and Companion Animals@ by Bernard E. Rollin and Michael D.H. Rollin, (72) AThe Pet World@ by Paul
Shepard, and (73) A Hand-Raising a Rhino in the Wild® by Anna Merz.


Armstrong-Buck, Susan, "What Process Philosophy Can Contribute to the Land Ethic and Deep Ecology," Trumpeter 8(1991):29-34. An analysis of intrinsic and inherent value, with attention to Callicott, Rolston, Regan, and others, also analysis of the sense of self-identification in deep ecology in Naess, Fox, Fox, and others. Armstrong-Buck claims that process metaphysics can complement these attempts at forming an environmental ethic, although process metaphysics is not without its own difficulties. Armstrong-Buck is professor of philosophy at Humboldt State University, Arcata, CA. (v2,#1)

Armstrong-Buck, Susan, "Whitehead's Metaphysical System as a Foundation for Environmental Ethics," Environmental Ethics 8(1986):241-259. Intuitions about the intrinsic value of nature require a metaphysical basis, and here it is argued that Whitehead's metaphysic provides that basis. Without this metaphysical grounding of value, Leopold's land ethic commits the Naturalistic Fallacy (p. 258). (Katz, Bibl # 1)

Arnason, Thorvardur, "Eigtingildi í náttúrunni -- heimspeki á villigötum?" (in Icelandic). Interview by Thorvardur Arnason with Holmes Rolston, III, in Hugur 17(2005), pages 12-26. Published in 2006. Hugur is an annual, the only Icelandic periodical that is solely dedicated to philosophy. Intrinsic values in nature, multi-leveled values in nature, humans in nature, uniqueness of humans, anthropogenic and anthropocentric values in nature, duties to species, ecosystems. Iceland as an especially challenging landscape for environmental ethics, far north, on the mid-Atlantic ridge, a harsh environment, life in extreme environments, unusual aesthetic beauty.

Arnhart, Larry, Natural Right: The Biological Ethics of Human Nature. Albany, NY: State University of New York Press, 1998. 331 pages. How Darwinian biology supports an Aristotelian view of ethics as rooted in human nature. Defending a conception of "Darwinian natural right" based on the claim that the good is desirable, Arnhart argues that there are at least twenty natural desires that are universal to all human societies because they are based in human biology. The satisfaction of these natural desires constitutes a universal standard for judging social practice as either fulfilling or frustrating human nature, although prudence is required in judging what is best for particular circumstances. The familial bonding of parents and children and the conjugal bonding of men and women illustrates social behavior that conforms to Darwinian natural right. Slavery and psychopathy illustrate social behavior that contradict Darwinian natural right. The natural moral sense does not require religious belief, although such belief can sometimes reinforce the dictates of nature. Arnhart is in political science at Northern Illinois University. (v.9,#3)

Arnhart, Larry., "Thomistic Natural Law as Darwinian Natural Right", Social Philosophy and Policy (Winter 2001), Social Philosophy and Policy Center, Bowling Green State University,
Bowling Green, Ohio. Reviewed recently in the Wilson Quarterly. (v.12,#2)

Arnold, Craig Anthony, "The Reconstitution of Property: Property as a Web of Interests," The Harvard Environmental Law Review 26(no. 2, 2002):281-364. Theoretical critiques of the bundle of rights metaphor (e.g. its alienating effects, its preoccupation with the margins of property law, its abstraction, and its excessive rights focus). How courts persist in defining property rights according to the nature of the object of those rights. Three different theoretical perspectives that emphasize the importance of the object and person-object relationships in understanding property: environmental theories, personhood theories, and expectations theories. A web of interests is a superior metaphor, because the web of interests represents not only a set of interconnected relationships among persons who share interests (more than rights) in an object, whether tangible or intangible, but also a set of particular relationships persons have with objects that have particular characteristics relevant to property law. Ways in which the web of interests metaphor helps us see certain property issues differently than the bundle of rights metaphor--regulatory takings, ownership of ecologically valuable resources like land, water, and wildlife, and property issues in corporations or intellectual property. Arnold is in law, Chapman University, Orange, CA. (v.13, #3)

Arnold, Craig Anthony (Tony), "The Reconstitution of Property: Property as a Web of Interests," Harvard Environmental Law Review 26(no. 2, 2002):281-364. In an odd and surprising irony, a robust, comprehensive concept of private property is necessary to advance environmental values, and conversely, a decline in the importance and meaning of property hurts environmental values. A person claiming a property interest or property right should be expected to show how he or she is connected to the object of the property interest. Reconceiving every area of property law from a web-of-interest perspective deserves attention. For example, a landowner may not have a reasonable expectation of making an economically productive use of fragile coastal wetlands. Landowners' experiences with implementation of the Endangered Species Act by the U.S. Fish and Wildlife Service have resulted in significant landowner frustration. In the past, the bundle of rights metaphor served to free property law from both antiquated doctrines and a narrow concept of property as absolute control over physical things. In this Article, I have not only criticized the bundle of rights concept of property but also argued that property law is alive but in search of a reconstituting metaphor. Arnold is Professor of Law and Director of the Center for Land Resources, Chapman University School of Law, Orange, CA.

Arnold, Craig Anthony (Tony). AThe Structure of Land Use Regulatory System in the United States. Journal of Land Use and Environmental Law, Vol. 22, no. 4 (2007): 441-523. This paper systematically analyzes the functions, location and scale, components, processes, values of the land use regulatory system in the United States. Arnold contends that critiques of the system as inherently inefficient, inequitable, or environmentally harmful are misplaced, and instead the system is able to mediate between people and places in a dynamic, functional, and adaptive manner. The system is relatively thin on law but thick on policy, tools, authority, and discretion. The article can be downloaded for free from the Social Science Research Network at: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1020305>.

evaluation of the relationships between environmental justice and land use planning. After summarizing the rise of the environmental justice movement, Arnold discusses the promise and failure of land use planning to achieve fair and healthy land use and environmental conditions in low-income and minority communities, including empirical evidence of zoning and land use disparities. He then lays out principles and tools of land use planning and regulation to achieve environmentally just communities: environmental justice planning principles, the relationship between environmental justice and smart growth, regulatory tools (e.g., zoning, discretionary permits, impact fees), community participation principles and methods (emphasizing robust and meaningful deliberative participatory processes), environmental impact assessments, inherent limits on land use planning and regulation (e.g., private property rights, state preemption, and politics), and community infrastructure, housing, redevelopment, and brownfields.

Arnold, Craig Anthony, "Working Out an Environmental Ethic: Anniversary Lessons from Mono Lake," *Wyoming Law Review* 4(no. 1, 2004):1-55. Does environmental law reflect or encourage an environmental ethic? The Mono Lake (California) conflict, now twenty-five years old, offers an ideal case study of the role of environmental law and litigation in achieving environmental conservation and implementing an environmental ethic. The California Supreme Court's Mono Lake opinion is regarded as one of the ten most important environmental law cases of the twentieth century. It has been cited in over 100 judicial or administrative opinions. Environmental law matters but only as a component of a broader social and natural whole. Anthony is in law, Chapman University School of Law, Orange, CA. (v. 15, # 3)

Arnold, Craig Anthony (Tony). @ *The Structure of Land Use Regulatory System in the United States.* Journal of Land Use and Environmental Law, Vol. 22, no. 4 (2007): 441-523. This paper systematically analyzes the functions, location and scale, components, processes, values of the land use regulatory system in the United States. Arnold contends that critiques of the system as inherently inefficient, inequitable, or environmentally harmful are misplaced, and instead the system is able to mediate between people and places in a dynamic, functional, and adaptive manner. The system is relatively thin on law but thick on policy, tools, authority, and discretion. The article can be downloaded for free from the Social Science Research Network at: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1020305>.

Arnold, Craig Anthony (Tony). *Fair and Healthy Land Use: Environmental Justice and Planning.* Chicago: APA Planning Advisory Service, 2007. Arnold offers a systematic evaluation of the relationships between environmental justice and land use planning. After summarizing the rise of the environmental justice movement, Arnold discusses the promise and failure of land use planning to achieve fair and healthy land use and environmental conditions in low-income and minority communities, including empirical evidence of zoning and land use disparities. He then lays out principles and tools of land use planning and regulation to achieve environmentally just communities: environmental justice planning principles, the relationship between environmental justice and smart growth, regulatory tools (e.g., zoning, discretionary permits, impact fees), community participation principles and methods (emphasizing robust and meaningful deliberative participatory processes), environmental impact assessments, inherent limits on land use planning and regulation (e.g., private property rights, state preemption, and politics), and community infrastructure, housing, redevelopment, and brownfields.


Aronow, Mary Ellen; Binkley, Clark S; Washburn, Courtland L, "Explaining Timberland Values in the United States", *Journal of Forestry* 102(no.8, December 2004):14-18(5).


Arrow, Kenneth, et al., "Economic Growth, Carrying Capacity, and the Environment," *Science* 268 (April 28, 1995): 520-521. Eleven authors, reporting from a Swedish conference; other authors include Robert Costanza, C. S. Holling, and David Pimentel. Economic policy typically ignores environmental concerns, or considers them tangential. But economic liberalization and other policies that promote gross national product are not substitutes for environmental policy. It is typically thought that in developing nations, environmental quality first degenerates and, with further development, later improves, a U-shaped curve. This is true for selected pollutants but not true for environmental quality as a whole. Economic policy needs to recognize carrying capacity and ecosystem resilience, though these are complex and dynamic, not simple and fixed relations. Economic liberation may require more, not less regulation, because the signals of ecosystem stress are frequently received after irreversible changes have already occurred, or are misinterpreted, or relocated to other nations, and there is little incentive under present policy for a more ecologically sustainable economics. Arrow is in economics at Stanford University; Costanza in ecological economics at the University of Maryland; Holling in zoology at the
University of Florida; Pimentel in entomology, ecology, and systematics at Cornell University. (v6,#2)


Arts, Bas, Rudig, Wolfgang. "Negotiating the 'Berlin Mandate': Reflecting on the First 'Conference of the Parties' to the UN Framework Convention on Climate Change," Environmental Politics 4(no.3, Fall 1995):481-. (v6,#4)

Asato, Cathy, "Beneath the Surface," Blue Planet 2 (no. 2, Fall 2002):30-33. Thirty years after the Clean Water Act mandated healthy water for America, American oceans are still in peril. This whole issue of Blue Planet is a thirty-year retrospective on progress and the lack of it in conserving oceans. (v.13,#4)


Ascher, William, "Understanding Why Governments in Developing Countries Waste Natural Resources," Environment 42 (No. 2, 2000): 8-. Although ignorance and corruption play some role in the waste of natural resources, the principle cause often lies elsewhere. (v.11,#2)


health and safety, toxic substance regulations, technology bargaining, and the law as it applies to the work environment.

Ashford, Nicholas A., and Charles C. Caldart. *Environmental Law, Policy, and Economics: Reclaiming the Environmental Agenda*. Cambridge, MA: The MIT Press, 2008. Ashford and Caldart survey the past several decades of environmental law, policy, and economics, focusing much of their discussion on pollution control and prevention. They argue that clear and stringent legal requirements, along with flexible means for meeting them and meaningful stakeholder participation, are necessary for creating technological transformations and environmental improvements.

Ashley, MV; Willson, MF; Pergams, OR; Odowd, DJ; Gende, SM; Brown, JS; "Evolutionarily enlightened management", *Biological Conservation* 111(no.2, 2003):115-123.


Ashlin, Alison and Richard J. Ladle, "Environmental Science Adrift in the Blogosphere," *Science* 312 (14 April 2006): 201. There are now more than 11.7 million weblogs, and the number is doubling every five months. There are 400,000 featuring discussions on environmental and conservation-related issues. Some are highly credible, many are not; weblogs are here to stay. Generally the public rates them as more reliable than they are. Consider extinction rates. There is some scientific consensus that the rate is in the range of 74-150 species going extinct every day. A survey of 20 blogs produced a range of one to several thousand per day, with nearly half the sites claiming over 200 per day. The authors argue that environmental scientists need to become more effective and credible bloggers. Ashlin and Ladle are at the Oxford University Centre for the Environment.


Asner, Gregory P, et al., "Selective Logging in the Brazilian Amazon," *Science* 310(21 October 2005):480-482. Remote sensing by satellite detects lands cleared for agriculture but forests selectively logged have mostly been invisible to satellites. These authors developed a large-scale, high-resolution remote sensing analysis, to discover that "selective logging doubles previous estimates of the total amount of forest degraded by human activities, a result with potentially far-reaching implications for the ecology of the Amazon forest and the sustainability of the human enterprise in the region." A considerable amount of this logging is on supposed forest reserves. Asner is in global ecology, Carnegie Institution of Washington, Stanford, CA.

  --Hendry, Joy, "Nature Tamed: Gardens as a Microcosm of Japan's View of the World"
  --Knight, John, "Soil as Teacher: Natural Farming in a Mountain Village," and many more. (v.13,#4)

Association for the Study of Literature and the Environment, Bibliography, 1990-1993. Nearly 700 books, articles, and dissertations on fiction, poetry, and non-fiction literature of the environment, criticism, environmental politics, history, philosophy, ethics, rhetoric, and theology. Cost $6.50, checks payable to ASLE, to Allison B. Wallace, ASLE Treasurer, HC78, Box 200, Unity College of Maine, Unity, ME 04988, USA. (v6,#2)

Association for the Study of Literature and the Environment, Handbook on Graduate Study in Literature and Environment. Cost $5.00, checks payable to ASLE, to Allison B. Wallace, ASLE Treasurer, HC78, Box 200, Unity College of Maine, Unity, ME 04988, USA. (v6,#2)


Athanasiou, Tom, *Divided Planet: The Ecology of Rich and Poor*. Athens, GA: University of Georgia Press, 1998. "Divided Planet has a simple premise--environmentalism is only now reaching its political maturity. Past enthusiasms offer little solace, and before the challenges of Asia and Africa, of the oceans and the air, past victories seem only the slightest prelude. Faith in solar democracy, easy reform, deep ecology and simple utopias of all kinds has faded year by year. The greens need enthusiasm, but they need all the powers of adulthood besides, and they know it" (p. 3). Athanasiou is active in environmental and technology politics, an active writer, who also runs an electronic publishing group at Sun Microsystems. (v.11,#3)


Atkinson, Richard C. et al (13 others)., "Public Sector Collaboration for Agricultural IP Management," Science 301(11 July 2003):174-175. An appeal by the presidents of universities and directors of public-sector research institutes concerned that the private and commercial patenting of intellectual property rights on agricultural plants is impeding research, particularly that which affects subsistence crops in the developing world. In many cases discoveries and technologies that were originally generated with public funding are no longer accessible as public goods. "Golden rice," for example has more than forty patents associated with it, which constrains further research on rice. These officials are proposing a Public-Sector Intellectual Property Resource for Agriculture to help correct these problems. (v 14, #3)

Atkinson, Robert B., James E. Perry, and John Cairns, Jr., "Vegetation Communities of 20-year old Created Depressional Wetlands," Wetlands Ecology and Management 13 (no. 4, 2005):469-478. Most species do not change, but there is some tendency for transition from annuals to perennial grasses. None of the wetlands tended to become shrub-scrub or forested wetlands. Atkinson is at VPI, Blacksburg, VA.

Atkinson, Alan, "Thou Shalt Care for the Earth: Evangelical Christians and Catholics are Beginning to See the Green Light," Utne Reader 68(1995):15-16. (v8,#3)

Atran Scott, and Douglas Medin. The Native Mind and the Cultural Construction of Nature. Cambridge, MA: The MIT Press, 2008. Growing concern with protecting the environment is accompanied by diminishing human contact with nature, with adverse effects on conservation. Atran and Medin examine the cognitive consequences of this loss of knowledge, the relationship between how people think about nature and how they act upon it, and how thinking and acting are affected by cultural differences. They argue that despite a base of universal processes, cultural differences in how nature is understood are associated with significant differences in environmental decision-making and intergroup conflict. There is extensive discussion of two case studies: (1) agro-forestry among Maya Indians and Spanish speakers in Mexico and Guatemala, and (2) resource conflict between American Indians and Euro-American fishers in Wisconsin.


Attfield, Robin and Wilkins, Barry, "Sustainability*. *Environmental Values* 3(1994):155-158. This paper supplies a critique of the view that a practice which ought not to be followed is ipso facto not sustainable, a view recently defended by Nigel Dower. It is argued that there are ethical criteria independent of the criterion of sustainability. The concept of sustainability is thus retrieved for the distinctive role and the important service in which environmental and social theorist (paradoxically including Dower) have hitherto employed it, not least when debating the nature, merits and demerits of sustainable of development. KEYWORDS:Sustainability, arguments, development, beneficience, justice. Attfield and Wilkins are in the philosophy section at the University of Wales College of Cardiff, U.K. (EV)

Attfield, Robin, "Sylvan, Fox and Deep Ecology: A View from the Continental Shelf." *Environmental Values* Vol.2 No.1(1993):21-32. ABSTRACT: Both Richard Sylvan's trenchant critique of Deep Ecology and Warwick Fox's illuminating reinterpretation and defence are presented and appraised. Besides throwing light on the nature and the prospects of the defence of Deep Ecology and of its diverse axiological, epistemological and metaphysical strands, the appraisal discloses the range of normative positions open to those who reject anthropocentrism, of which Deep Ecology is no more than one (and, if Fox's account of its nature is right, may not be one at all). A position intermediate between Deep Ecology and anthropocentrism is advocated, which has been called by Wayne Sumner "middle-depth environmentalism--a kind of continental shelf between the shallow and deep extremes." KEYWORDS: Deep Ecology, impartiality, value-theory, identification, self-realization, biocentrism. School of English Studies, Journalism and Philosophy University of Wales College of Cardiff, PO Box 94, Cardiff CF1 3XB, UK.


Attfield, Robin, "Biocentrism, Moral Standing and Moral Significance." *Philosophica* 39 (1987): 47-58. A defence of the moral standing of all living entities, based on the analogical argument that all living entities have the capacity to realize a good of their own; a rejection of Taylor's biocentric egalitarianism. (Katz, Bibl # 2)

Attfield, Robin and Barry Wilkins, eds., *International Justice and the Third World: Essays in the Philosophy of Development*. London: Routledge, 1992. This anthology contests the view that there is no such thing as justice between societies of unequal power, and that there is no obligation to assist poor people in distant countries. Third World indebtedness is profoundly exploitative, and Third World debts should be unconditionally cancelled. This collection includes Robin Attfield, "Development and Environmentalism"; Geoff Hunt, "Is There a Conflict between Environmental Protection and the Development of the Third World?"; Nigel Dower, "Is There a Right to Sustainable Development?"; Barry Wilkins, "Debt and Underdevelopment: The Case for Cancelling Third World Debts." Other contributors are Kai Nelsen and Onora O'Neill. Both editors are at the University College of Wales, Cardiff. (v3,#3)
Attfield, Robin, "Biocentric Consequentialism, Pluralism and 'The Minimax Implication': A Reply to Alan Carter," Utilitas 15 (no. 1, March 2003): Alan Carter's recent review in Mind of my Ethics of the Global Environment combines praise of biocentric consequentialism (as presented there and in Value, Obligation and Meta-Ethics) with criticisms that it could advocate both minimal satisfaction of human needs and the extinction of 'inessential species' for the sake of generating extra people. Carter also maintains that as a monistic theory it is predictably inadequate to cover the full range of ethical issues, since only a pluralistic theory has this capacity. In this reply, I explain how the counterintuitive implications of biocentric consequentialism suggested by Carter (for population, needs-satisfaction and biodiversity preservation) are not implications, and argue that since pluralistic theories (in Carter's sense) either generate contradictions or collapse into monistic theories, the superiority of pluralistic theories is far from predictable. Thus Carter's criticisms fail to undermine biocentric consequentialism as a normative theory applicable to the generality of ethical issues." Attfield is in philosophy at University of Wales, Cardiff.

1. Nature and the Global Environment
2. Global Ethics and Environmental Ethics
3. Trustees of the Planet
4. The Threat of Extinction
5. Global Resources and Climate Change
6. Sustainable Development
7. Population and Poverty
8. Biodiversity and Preservation
9. Environmental Justice and World Order
10. Sustainability: Perspectives and Principles
11. World Citizenship in a Precarious World

Attfield is in philosophy, University of Wales, Cardiff, and known in environmental ethics since the publication of his The Ethics of Environmental Concern, 1983 (2nd ed. 1993). (v.10,#1)

(University of Lancaster), "Natural Capital"; Peter List (Oregon State University), "Some Philosophical Assessments of Environmental Disobedience"; Dale Jamieson (University of Colorado), "Global Environmental Justice"; and Ruth McNally (University of West England, Bristol) and Peter Wheale (European Business School), "Environmental and Medical Bioethics in Late Modernity: Anthony Giddens, Genetic Engineering and the Post-Modern State." These are papers from the Royal Institute of Philosophy Conference, "Philosophy and the Natural Environment," held at the University of Wales in Cardiff in July 1993. (v5,#3)


Attfield, Robin, "Deep Ecology and Intrinsic Value: A Reply to Andrew Dobson," Cogito 4(Spring 90):61-66. A discussion of whether intrinsic value is relevant to the Green Movement politically, replying to Andrew Dobson, "Deep Ecology," Cogito, 3/1 (1989):41-46. Dobson claims, "There may be no doubt that Deep Ecology is indeed the Green Movement's philosophical basis," but Attfield replies that various philosophical positions can support the Green Movement. A theory of intrinsic value in some nonhuman living things, both those with and without subjective experience, is intelligible and important in supplying a philosophical basis for the Green Movement. Attfield is at the University of Wales, College of Cardiff. (v1,#3)


justifying value-ascriptions to nonhuman natural entities. Rodman's criticism of moral extensionism is not specific enough, and Callicott's holism is incoherent unless based on the value of individuals. An important paper for all holistic environmental philosophers to consider. (Katz, Bibl # 1)


Attfield, Robin, "Preferences, Health, Interests and Value," EJAP, The Electronic Journal of Analytic Philosophy, Issue on Justifying Value in Nature, 3 (Spring 1995). ISSN: 1071-5800. Unlike artefacts, living creatures have a good of their own and are morally considerable. The capacity for preferences is sufficient but not necessary for having interests and moral considerability. The capacity for health is also sufficient. This also has the important implication that there is more to human good than mental states and their objects. To subscribe to EJAP (at no cost): Send a message to: <listerv@iubvm.ucs.indiana.edu> with "subscribe ejap [Firstname] [Lastname]" in the body. Subscribers receive instructions for retrieving EJAP files from the listserver. Anonymous FTP: phil.indiana.edu/ejap/ Gopher: phil.indiana.edu World Wide Web: http://www.phil.indiana.edu/ejap/ EJAP is produced at the Department of Philosophy, Indiana University: ejap@phil.indiana.edu. (v6,#4)


Attfield, Robin, The Ethics of Environmental Concern. New York: Columbia University Press, 1983. Pp. xi, 220. Second edition: Athens, GA: University of Georgia Press, 1993. Hardback and paper. First edition: This is a major work of scholarship and argument that attempts, perhaps, to cover too much ground. Attfield has patterned his book after Passmore's Man's Responsibility for Nature (1974), the first important philosophical work in environmental ethics. Like Passmore, Attfield first canvasses the religious and philosophical traditions of Western culture to show that "Stewardship" of nature does not imply "Domination"; thus, no new ethic of environmental concern is needed. This journey into the history of ideas is then followed by an argument designed to show that one old ethical theory, classical utilitarianism, is more than adequate to justify moral treatment of the environment. But Attfield's utilitarianism is nonanthropocentric: the intrinsic value to be maximized is not happiness or rational experience but the satisfaction of interests. Whatever has interests is valuable, and for Attfield, all living individuals have interests. He thus arrives at a position that is "not as deep as `deep ecology' " and yet deeper than the "shallow" kind of human-interest environmentalism. But the sticking point for any classical or total-view utilitarianism is the weighting of the values to be maximized. Attfield adopts Donald VanDeVeer's "Two Factor Egalitarianism" ["Interspecific Justice," Inquiry 22 (1979):55-79], the balancing of basic, serious, and peripheral interests in beings that lack or have self-consciousness. This view needs a very precise casuistry if it is to be at all successful, but I think it will always lead to a hopeless muddle: we are back with Mill's contrast of the dissatisfied Socrates and the satisfied pig. Is the gourmet's interest in milk-fed veal a basic interest or a peripheral one? Attfield is ultimately unable to overcome an anthropocentric bias, because of his
rejection of environmental holism. Chapters on obligations to the future and the existence of possible people also reveal the unintelligibility of utilitarian thinking. Contains an extensive and valuable bibliography. (Katz, Bibl # 1) Attfield, Robin. The Ethics of Environmental Concern. Reviewed in Environmental Ethics 8(1986):77-82.

The second edition is updated with a new introduction and a detailed review of recent literature. (v3,#1)

Attfield, Robin, Value, Obligation, and Meta-Ethics. Amsterdam/Atlanta: Editions Rodopi B.V., 1995. 319 pages. $ 31.00 paper. Part I, on Value, defends a biocentric theory of moral standing and the coherence and objectivity of belief in intrinsic value, despite recent objections. Chapter 3 is "What is Intrinsic Value?"; Chapter 4 begins with "The Intrinsic Value of Flourishing"; Chapter 6 is "Priorities Among Values." Intrinsic value is located in the flourishing of living creatures; specifically, a neo-Aristotelian, species-relative account is developed of wellbeing or flourishing, in terms of the essential capacities of species. There follows a theory of priorities, or of relative intrinsic value, in which the satisfaction of basic needs takes priority over other needs and wants, and the interests of complex and sophisticated creatures over those of others, where they are at stake. Parts two and three continue with theories of rightness and obligation and meta-ethics, defending a naturalist meta-ethic. This analysis continues Attfield's earlier work, A Theory of Value and Obligation (1987). Attfield teaches philosophy at the University of Cardiff, Wales. (v7,#1)

Attfield, Robin, Environmental Ethics: An Overview for the Twenty-First Century. Cambridge: Polity Press (Blackwell), 2003. Includes: Local and global environmental problems; theories of value; environmental ethics and its neighbors; human stewardship of nature; holism, anthropocentrism and biocentrism compared; biocentric consequentialism (Attfield's preference); critiques of environmental ethics. Can environmental ethics make a difference? Taking the future seriously. Do human interests and environmental responsibilities converge? Sustainable development; population, and precaution; the global community and global citizenship. A most inclusive, global, cosmopolitan, universal ethic. An unexcelled survey and synthesis of the enormous range of challenging issues, and of the literature of their debate. Attfield is in philosophy, University of Wales, Cardiff. (v 14, #3)

Attfield, Robin, "Saving Nature, Feeding People and Ethics," Environmental Values 7(1998): 291-304. Holmes Rolston's case for holding that it is sometimes right to let people starve in order to save nature is argued to be inconclusive at best; some alternative responses to population growth are also presented. The very concept of development implies that authentic development, being socially and ecologically sustainable, will seldom conflict with saving nature (sections 1 and 2). While Rolston's argument about excessive capture of net primary product is fallacious, his view should be endorsed about the wrongness of 'development' in areas where sustainable development is impossible, but not unqualifiedly endorsed about those areas where it is feasible (section 3). Important as policies promoting sustainable levels of population are, representing population growth as a cancer is misguided, and could engender indifference to suffering (sections 4 and 5). The neo-Malthusian paradigm (which makes population growth the cause of both poverty and environmental degradation) appears to conflict with a considerable body of empirical evidence; the kind of policies needed in Third World countries are ones which enlist people's energies for producing food and preserving nature alike (section 6). KEYWORDS:
nature, development, value, ethics, population. Robin Attfield is at University of Wales Cardiff, UK. (EV)

Attfield, Robin, "Unprojected Value, Unfathomed Caves and Unspent Nature: Reply to an Editorial," Environmental Values 14(2005): 513-518. This article replies to Alan Holland's challenge to reconcile belief in non-anthropogenic intrinsic value with the poetry of John Clare and its projection onto nature of human feelings, and thus with projective humanism. However, in literature and broadcasts, feelings are found projected upon buildings and belongings as well as upon natural creatures. This and the fact that many living creatures (such as the Northamptonshire species not remarked by Clare) never become objects of human projections but still remain valuable suggests that the basis of natural value lies elsewhere, at least in part. Such themes, together with that of nature's independent value, are variously illustrated from poems of Gray, Cowper and Marvell, and from expressions of nature's otherness in the Christian verse of Hopkins (who also helps answer Holland's further question concerning 'what we have lost'), and in the pantheistic (or pagan) prose of Grahame's Wind in the Willows. In none of these writers does the value of nature depend on the projection of a humanistic sensitivity, but in different ways on the nature (diversely conceptualised) of natural creatures themselves. Attfield is in philosophy, University of Wales, Cardiff. (EV)


Attfield, Robin. "Has the History of Philosophy Ruined the Environment?" Environmental Ethics 13(1991):127-37. I review and appraise Eugene C. Hargrove's account of the adverse impacts of Western philosophy on attitudes to the environment. Although significant qualifications have to be entered, for there are grounds to hold that philosophical traditions which have encouraged taking nature seriously are not always given their due by Hargrove, and that environmental thought can draw upon deeper roots than he allows, his verdict that the history of philosophy has discouraged preservationist attitudes is substantially correct. Environmental philosophy thus has a significant (if not quite an unrivalled) role to play in the reconstruction of many of the traditional branches of philosophy, as well as in the protection of the natural world. Attfield is at the Philosophy Section, University of Wales College of Cardiff, Cardiff, Wales, UK. (EE)

Attfield, Robin. Value, Obligation, and Meta-Ethics. Atlanta & Amsterdam, Editions Rodopi B. V., 1995. Defends a biocentric theory of moral standing and the coherence and objectivity of belief in intrinsic value, despite recent objections. Intrinsic value is located in the flourishing of living creatures. A theory of priorities, or of relative intrinsic value, in which the satisfaction of basic needs takes priority over other needs and wants, and the interests of complex and sophisticated creatures over those of others. A practice-consequentialist theory of rightness and obligation. Meta-ethical theories are sifted and moral relativism rejected, and a cognitivist and
naturalist meta-ethic defended. Attfield teaches philosophy at the University of Wales, Cardiff. (v6,#3)


Attfield, Robin. "Postmodernism, Value and Objectivity," Environmental Values 10(2001):145-162. The first half of this paper replies to three postmodernist challenges to belief in objective intrinsic value. One lies in the claim that the language of objective value presupposes a flawed, dualistic distinction between subjects and objects. The second lies in the claim that there are no objective values which do not arise within and/or depend upon particular cultures or valutational frameworks. The third comprises the suggestion that belief in objective values embodies the representational theory of perception. In the second half, a defence is offered of belief in objective intrinsic value. Objectivists hold that axiological properties supply interpersonal reasons for action for any relevant moral agent. The intrinsically valuable is understood as what there is reason to desire, cherish or foster in virtue of the nature of the state or object concerned. The concept of intrinsic value is shown to be instantiated, and defended against a range of criticisms. Keywords: Intrinsic value, extrinsic value, postmodernism, objectivity, subjectivism, dualism, representaionalism, axiology. Robin Attfield is at the School of English, Communication and Philosophy, University of Wales Cardiff. UK. (EV)

Attfield, Robin. "Beyond the Earth Charter: Taking Possible People Seriously." Environmental Ethics 29(2007):359-367. The Earth Charter is largely a wholesome embodiment of a commendable and globally applicable ecological ethic. But it fails to treat responsibilities toward future generations with sufficient clarity, presenting these generations as comparable to present and past generations, whose members are identifiable, when in fact most future people are of unknown identity, and when the very existence of most of them depends on current actions. It can be claimed that we still have obligations with regard to whoever there will be whom we could affect, and in addition, all the possible people of the future whom we could affect have moral standing, as well as corresponding members of other species. These obligations clash with the person-affecting principle, which considerably restricts such obligations and the scope of moral standing at the same time. Finally, there are implications for sustainability, at least with regard to sustainable levels of population and with regard to global warming, and thus a need for further clarification of the content of responsibilities toward future generations. (EE)


Audi, Robert, ed., The Cambridge Dictionary of Philosophy. New York: Cambridge University Press, 1995. 4,000 entries, said to be the most comprehensive and authoritative such dictionary, and yet also on "pure" philosophy, and therefore no entries on environmental philosophy, animal welfare, ecofeminism, and other impure types of philosophy. Hence also perhaps not as
comprehensive and authoritative as claimed, not to say provincial or even narrow in its purity. Biographical entries are restricted to dead philosophers. (v6,#4)


Austin, Richard Cartwright, Reclaiming America: Restoring Nature to Culture. Creekside Press, P. O. Box 331, Abingdon, VA 24210. Phone 703/628-6416. This is the fourth in a series on environmental theology, all by Austin, who is a Presbyterian minister active in environmental conservation in the Appalachian area. Previous titles, Beauty of the Lord: Awakening the Senses; Hope for the Land: Nature in the Bible, and Baptized into Wilderness: A Christian Perspective on John Muir, were published by John Knox Press, now Westminster/John Knox, though all may now be ordered from Creekside Press. (v1,#2)


aspect of that which holds things together, supporting life and individuation. Beauty joins experience to ethics. We experience beauty intuitively: it is an affecting experience which motivates thought and action. The experience of beauty gives us a stake in the existence of the beautiful. Ecology can explore the relationships of natural beauty scientifically: it may be a science of the beauty of the Earth. The beauty of the world is necessary to its survival. Beauty is manifest in the interplay of interdependence with individuality, yielding diversity. The most beautiful relationships are those which recognize diversity, support individuality, and empathetically span the distinctions between beings. The sense of beauty is not a luxury, but a distinctive human vocation. Austin is an environmental theologian with Holston Presbytery, Dungannon, VA. (EE)


Austin, Susan A. " Tradable Emissions Programs: Implications Under the Takings Clause." Environmental Law 26, no.1 (1996): 323. Tradable emissions programs are an innovative, market-based alternative to the traditional command-and-control method of air pollution regulation. Austin explores whether tradable emissions programs could render the government vulnerable to a Fifth Amendment takings claim should subsequent government actions decrease or destroy the value of tradable emissions permits. (v7, #3)


Ausubel, Jesse H., "Can Technology Spare the Earth?" American Scientist 84(1996):166-178. Evolving efficiencies in our use of resources suggest that technology can restore the environment even as population grows. Ausubel directs the Program for Human Environment at Rockefeller University. (v7,#2)


Auyero, Javier, and Debora Swistun. AThe Social Production of Toxic Uncertainty.® American Sociological Review Vol. 73, no. 3 (2008): 357-79. Using two and a half years of archival research and ethnographic fieldwork in an Argentine shantytown with high levels of air, ground, and water contamination, Auyero and Swistun examine residents' perceptions of contamination. The authors argue that the residents' confusion about the sources and effects of pollution is the
result of the Arealional anchoring of risk perceptions and a Alabor of confusion created by powerful outside actors.

Auyero, Javier, and Debora Swistun. *The Social Production of Toxic Uncertainty*. *American Sociological Review* Vol. 73, no. 3 (2008): 357-79. Using two and a half years of archival research and ethnographic fieldwork in an Argentine shantytown with high levels of air, ground, and water contamination, Auyero and Swistun examine residents' perceptions of contamination. The authors argue that the residents' confusion about the sources and effects of pollution is the result of the Arealional anchoring of risk perceptions and a Alabor of confusion created by powerful outside actors.


Avery, Stephen, "The Misbegotten Child of Deep Ecology," *Environmental Values* 13 (2004):31-50. This paper offers a critical examination of efforts to use Heidegger's thought to illuminate deep ecology. It argues that deep ecology does not entail a non-anthropocentric or ecocentric environmental ethic; rather, it is best understood as offering an ontological critique of the current environmental crisis, from a perspective of deep anthropocentrism. Avery is in philosophy, University of New England, Armidale, NSW, Australia. (EV)


Axelrod, Lawrence J., and Suedfeld, Peter. "Technology, Capitalism, and Christianity: Are They Really the Three Horsemen of the Eco-Collapse?" *Journal of Environmental Psychology*, vol. 15, no. 3 (September 1995): 183-95. An examination of the evidence for the frequent accusation that technology, capitalism, and Christianity, the three bases of modern Western Society, are root causes of environmental degradation. Although these three are associated with failures to protect the environment, label them as causal factors contradicts known facts. Axelrod and Suedfeld are in psychology at the University of British Columbia. (v7, #3)

Axelsen, Kaarin L., "Problems of Punitive Damages for Political Protest and Civil Disobedience," *Environmental Law* 25 no. 2 (1995):495-496. Axelsen examines Huffman & Wright Logging Co. v. Wade, a recent Oregon case in which members of Earth First! were assessed punitive damages for trespassing on private property to protest a logging operation. She concludes that the freedom of expression provisions of the U.S. and Oregon Constitutions make punitive damages inappropriate in cases of political protest and civil disobedience. (v6,#2)

Axline, Michael, "Federal Lands and Invisible Hands," *Ecology Law Quarterly* 25(No.4, 1999):611-. (v.10,#2)
Axline, Michael. "Forest Health and the Politics of Expediency." *Environmental Law* 26, no.2 (1996): 613. In the summer of 1995, Congress attached a now-notorious salvage logging rider to an emergency appropriations bill. Axline criticizes the salvage logging rider as poor policy and a violation of proper Congressional procedure. Recognizing the dual needs for a sound Northwest economy and healthy national forests, Axline concludes that the salvage logging rider fails to achieve either objective and may instead frustrate both of them. (v7, #3)

Ayensu, Edward, et al. (a couple dozen others!), "International Ecosystem Assessment," *Science* 286(22 October 1999):685-686. Ecosystem management on global scales. The authors argue that an international system of ecosystem modelling and monitoring, integrating the many differing factors--climate change, biodiversity loss, food supply and demand, forest loss, water availability and quality--is urgently needed. The magnitude of human impacts on ecosystems is escalating. One third of global land cover will be transformed in the next hundred years. In twenty years world demand for rice, wheat, and maize will rise by 40%. Demands for water, for wood will double over the next half century. At the turn of the millennium, we need to undertake the first global assessment of the condition and future prospects of global ecosystems. (v10,#4)

Ayers, Harvard; Hager, Jenny; and Little, Charles E., eds., *An Appalachian Tragedy*. San Francisco: Sierra Club Books, 1998. $ 45.00. The splendor of Appalachia, from forest floor to treetops, is threatened by pollution. Text and 200 photographs reveal the beauty and document the harm. (v9,#2)

Ayres, Robert U., Jeroen C. J. M. van den Bergh, and John M. Gowdy. "Strong versus Weak Sustainability: Economics, Natural Sciences, and "Consilience." *Environmental Ethics* 23(2001):155-168. The meaning of sustainability is the subject of intense debate among environmental and resource economists. Perhaps no other issue separates more clearly the traditional economic view from the views of most natural scientists. The debate currently focuses on the substitutability between the economy and the environment or between "natural capital" and "manufactured capital" a debate captured in terms of weak versus strong sustainability. In this article, we examine the various interpretations of these concepts. We conclude that natural science and economic perspectives on sustainability are inconsistent. The market-based Hartwick-Solow "weak sustainability" approach is far removed from both the ecosystem-based "Holling sustainability" and the "strong sustainability" approach of Daly and others. Each of these sustainability criteria implies a specific valuation approach, and thus an ethical position, to support monetary indicators of sustainability such as a green or sustainable Gross Domestic Product (GDP). The conflict between "weak sustainability" and "strong sustainability" is more evident in the context of centralized than decentralized decision making. In particular, firms selling "services" instead of material goods and regarding the latter as "capital" leads to decisions more or less consistent with either type of sustainability. Finally, we discuss the implications of global sustainability for such open systems as regions and countries. Open systems have not been dealt with systematically for any of the sustainability criteria. (EE)


Babbitt, Bruce, "Kudzu, Kudzu, Kill! Kill! Kill!" Harper's Magazine (July 1998): 17-18. Secretary of Interior Bruce Babbitt believes fighting "invasive alien species" can bring people together. According to Babbitt, weeds cause environmental havoc on a scale only matched by floods, earthquakes, mud slides, hurricanes, and fire. They infest 100 million acres in the U.S. (an area equivalent in size to a square with 400-mile sides) and are spreading at a rate of 14 percent per year. Weeds "homogenize the diversity of creation," threaten native plants and animals with extinction, erode soil, spread wildfire, ignore borders and property lines, and damage property values. Speaking before the Science in Wildland Weed Management Symposium, Babbitt said, "Weeds slowly, silently, almost invisibly, but steadily, spread all around us until, literally encircled, we can no longer turn our backs. The invasion is now our problem. Our battle. Our enemy. ... The invasion and spread of noxious alien weeds unites us. It unites across political, economic and property boundaries. It brings solidarity among opposing groups. It compels us to share strategic responses. It calls on us to rise above our sometimes petty day-to-day concerns." Babbitt urges everyone to "act now and act as one" in order to "beat this silent enemy." (v9,#2)

Babbitt, Bruce, "Another Attack on the Arctic," New York Times, July 8, 2004. This time a proposal to lease rights for gas and oil development on Teshekpuk Lake in Alaska, a shallow lake 30 miles across, the summer breeding ground for hundreds of thousands of waterfowl, as well as important to indigenous Inupiat communities. Babbitt was U.S. Secretary of the Interior from 1993-2001. (v. 15, # 3)

民主理论提供了一个超越政策僵局的机会，为利益集团的自由主义提供了一个基础，并为解决理性、坚定的民主和要求的环境保护提供了基础。

巴伯，沃尔特 F. 和罗伯特 V. 巴特利特，Deliberative Environmental Politics: Democracy and Ecological Rationality. 剑桥, MA: MIT Press, 2005。


巴克，大卫，Canoe Country: An Embattled Wilderness. 明尼苏达州米诺夸: 北北文思出版社, 1991. (P. O. Box 1360, Minocqua, WI 54548) 207 pages, paper. 这部历史和当前状态的边界水域皮划艇区域在明尼苏达州。道路、马达、木材收获、采矿、捕鱼、度假村、皮划艇租赁商，地方对国家利益，机动航路，荒野作为圣洁之地，与加拿大奎特科省立公园的关系。巴克是马萨诸塞州米诺夸大学文学院教授。 (v7,#1)

(v8,#3)

巴克，大卫，A Wilderness Within: The Life of Sigurd F. Olsen. 明尼阿波利斯：明尼苏达大学出版社, 1997. 387 pages. $ 25.00. 也有一系列明尼苏达大学出版社发布的新版本：The Singing Wilderness, 1997; The Lonely Land, 1997; Listening Point, 1997; and Runes of the North, 1997. (v9,#2)

巴克豪斯，加里和穆鲁宁，约翰，eds., Transformations of Urban and Suburban Landscapes: Perspectives from Philosophy, Geography, and Architecture. 兰姆, MD: 里奇顿出版社, 2002. 地理和空间在当代景观，自然和城市。

巴克豪斯，加里，和约翰·穆鲁宁，eds., Ecoscapes: Geographical Patterning of Relations. 兰姆, MD: 里奇顿出版社, 2006. 一个地形是文化视角，与地理视角交织。


Backus, G.B.C., Den Hartigm, L.A., Verstegen, M.W.A., "Implications of Animal Production Technology for the Environment", Journal of Agricultural and Environmental Ethics 6(1993). Intensive agricultural production has adverse effects on the quality of the environment. The pollution of air, water and soil has become a serious problem in the Netherlands due to the failure of the market to convey to the individual farmer the social cost associated with agricultural production. Environmental policies that take into account environmental costs and benefits as well as income consequences must be further developed. Backus and Den Hartigm are in the Research Institute for Pig Husbandry, P.O. Box 83, 5240 AB Rosmalen, The Netherlands. M.W.A. Verstegen is in the Department of Animal Nutrition, Agricultural University, Wageningen, The Netherlands.


Baden, John A., and Noonan, Douglas, eds., Managing the Commons, 2nd ed. Bloomington, ID: Indiana University Press, 1998. The first edition was twenty years ago. Much attention to Garrett Hardin and the problems he raises, and various efforts in economics and politics to manage the commons. (v9,#2)

Baden, John, "Spare that Tree!" *Forbes*, December 9, 1991. Under the U.S. Forest Service, Washington is managing the national forests in ways that are both economically and environmentally unsound. (v3,#1)

Baden, John A., Snow, Donald, eds. *The Next West: Public Lands, Community, and Economy in the American West*. Covelo, CA: Island Press, 1997. 272 pp. $45 cloth, $22.95 paper. The writers reflect on what has gone wrong in the region, and point the way to a Next West based on the renewal of Jeffersonian democracy, experiments in local and supra-local control of public lands, and the use of markets to replace the political allocation of natural resources. (v8,#2)


Badiner, Allan Hunt, *Dharma Gaia: A Harvest of Essays in Buddhism and Ecology*. Essays by over thirty Buddhist thinkers and ecologists. Parallax Press, P. O. Box 7355, Berkeley, CA 94707. 1990. $ 15.00. (v1,#2)


Baer, Paul, et al., "Equity and Greenhouse Gas Responsibility," *Science* 289(2000):2287. Developed countries have agreed to base emissions goals on 1990 levels, and the U.S. insists on "meaningful participation" by the developing countries. But this just grandfathers in existing disproportions. Global carbon emissions average one metric ton per year per person; developed nations emit three to five, the U.S. five. Developing nations emit about .6, though many of them only .2. When the global population reaches ten billion as currently estimated, per capita emissions must be stabilized at .3 per person per year. A more just principle would be to base emissions on a per capita basis. This is simple and it gives each person equal access to and responsibility for the atmosphere. The authors are (mostly) with the Energy and Resources Group, University of California at Berkeley. But, replies Arthur Westing, this proposal just grandfathers in existing population excesses, no better than grandfathering in existing development excesses. A more equitable proposal is to allocate a country's emissions total on the basis of the airspace over that country. See Arthur H. Westing, "Atmospheric Ethics," *Science* 291(2001):827. (EE v.12,#1)


Bagla, Pallava, "Indian Activists Release Disputed Report," *Science* 309(30 September 2005):2146. A report commissioned by the Indian Ministry of Environment and Forests has prepared a 1,300 page report on biodiversity in India, but the government does not want the report released. The group plans to defy the order not to release it and to release it anyway. The report was prepared with funds from the Global Environment Facility and with the co-operation of the India office of the United Nations Development Programme (UNEP). The report concludes that "India's model of development is inherently unsustainable and destructive to biodiversity." Government officials consider the report inaccurate in part and also an embarassment.

Bagla, Pallava, "50 Monkeys Taken from Indian Lab," *Science* 285(1999):997. India and experiments on monkeys. Armed with a government order and escorted by police, animal activists took 50 rhesus monkeys from India's National Center for Laboratory Animal Sciences in Hyderabad and released them into the wild. The monkeys were to have been used in testing a potential drug against immune disorders. India has new regulations on the care of animals used in research, and the laboratory was not meeting those standards. Researchers protest that half of India's research of this kind could be shut down. (v. 10, # 3)

Bagla, Pallava. A Controversial Rivers Project Aims to Turn India's Fierce Monsoon into a Friend. @ *Science* Vol. 313, no. 5790 (25 August 2006): 1036-37. Bagla discusses a controversial project to divert monsoon runoff from twelve rivers in eastern India to parched western states involving relocating tens of thousands of people.


Bahre, Conrad Joseph, *A Legacy of Change: Historic Human Impact on Vegetation in the Arizona Borderlands* (Tempe: University of Arizona Press, 1991). 250 pages. $ 29.95. Most of the degradation of southeastern Arizona lands has occurred since the Anglo settlers began to arrive in the 1870's. Bahre is a geographer at the University of California, Davis. (v2,#1)

Bahro, Rudolf, *Avoiding Social and Ecological Disaster*. Bath, U.K.: Gateway Books, 1994. Social and ecological disaster is imminent. Bahro calls for abolition of the existing economic orders, a world transformation, a new collective psyche, a spiritual renaissance, the rise of a new consciousness. There is a need to change the basic psychological structure of Western humanity. We do not wish to ecologize the boat in which we presently live but to build new lifeboats. Bahro teaches philosophy at Humbolt University, Berlin. (v6,#4)


Bailey Catherine, A> Africa Begins at the Prynees=: Moral Outrage, Hypocrisy, and the Spanish Bullfight, @ Ethics and the Environment 12(no. 1, 2007):23-37. The long history of criticism directed at bullfighting usually suggests that there is something especially morally noxious about it. I analyze the claims that bullfighting is distinctively immoral, comparing it to more widely accepted practices such as the slaughtering of animals for food. I conclude that, while bullfighting is horrific, the emphasis on it as especially "uncivilized" may serve to disguise the similarities that it has with other practices that also depend on animal suffering. I conclude that, for many, the hypocritical maintenance of a self-image as "civilized," despite great moral crimes committed against animals, seems to be facilitated by a focus on this especially dramatic example of animal cruelty. Bailey is at Minnesota State University.

Bailey, Cathryn, "On the Back of Animals: The Valorization of Reason in Contemporary Animal Ethics,” Ethics and the Environment 10(no. 1, 2005):1-18. Despite the fact that feminists have compellingly drawn connections between traditional notions of reason and the oppression of women and nature, many animal ethicists fail to deeply incorporate these insights. After detailing the links between reason and the oppression of women and animals, I argue that the work of philosophers such as Tom Regan and Peter Singer fails to reflect that what feminists have called is not the mere inclusion of emotion, but a recognition of the inherent continuity between the two. To ignore this continuity, I conclude, risks reinscribing the very suffering we seek to eliminate. Bailey is in philosophy, Minnesota State University, Mankato. (Eth&Env)

Bailey, Conner, and Pomeroy, Caroline, "Resource Dependency and Development Options in Coastal Southeast Asia.” Society and Natural Resources 9, no.2 (1996): 191


Bailey, Ronald, Eco-Scam: The False Prophets of Ecological Apocalypse. St. Martin's. 228 pages. $ 19.95. Bailey skewers false prophets and their failed forecasts. Paul Ehrlich won a MacArthur Foundation "genius" grant and the Swedish Academy's Crafoord price. He also predicted in 1969 that hundreds of millions would soon perish in smog disasters in New York and Los Angeles, that the oceans would die of DDT poisoning by 1979, and that the U. S. life expectancy would drop to 42 years by 1980 due to cancer epidemics. Lester Brown, another MacArthur genius and Worldwatch Institute president, predicted that global oil production would peak in 1990. Carl Sagan predicted that the Kuwaiti oil fires would lead to a global freeze. The
global warming issue, "the mother of all environmental scares" is a another eco-scam. All the risks associated with the ozone layer do not amount to moving more than 100 miles south, from Washington, DC to Richmond, Virginia. Only fifteen years ago, Stephen Schneider, now fearing global warming, was then fearing global cooling. Nor does it make any difference what the ecocatastrophe faced is, the problem is always industrial capitalism. Bailey was formerly a writer with Forbes and is now a producer for the PBS series, "Technopolitics." (v4,#2)


Baillie, Harold W., "Genetic Engineering and our Human Nature," Philosophy and Public Policy Quarterly 23(nos. 1-2, 2003):28-31. "Understanding the sacred helps us identify elements in nature and human nature that ought to be preserved...." "There is a richness of content derived from the rootedness of the sacred in a larger reality, a reality that transcends the human, and to which humans need access." Baillie is in philosophy, University of Scranton.


Baird, Nicola, "Danger islands," The Ecologist 31(no.2, MAR 01 2001):58-. The Solomon Islands are no paradise. Rising sea levels and political turmoil threaten this south sea island group as never before. (v.12,#4)


Bajracharya, Siddhartha, Peter Furley, and Adrian Newton, Adrian. AImpacts of Community-based Conservation on Local Communities in the Annapurna Conservation Area, Nepal. @ *Biodiversity and Conservation* Vol. 15, no. 8 (2006): 2765-86.

Baker, Beth, "Environmentalists Sue Small Business Administration over Urban Sprawl," *Bioscience* 51(no.1, 2001 Jan 01): 14-. (v.12,#3)

Baker, Beth, "Government Regulation of Wetlands Is Under Siege from All Sides" *Bioscience* 49(no. 11, Nov 01 1999): 869-. (v10,#4)


Baker, Beth, "Farm Bill Environmental Program May Threaten Native Prairie Habitat.,” *Bioscience*. 50 (No. 5, 2000 May 01): 400-. (v.11,#4)


Baker, Beth. "A Reverent Approach to the Natural World", *Bioscience* 46(no.7, 1996):475. Religious organizations are uniting with each other and with the scientific community to improve environmental protection. (v7,#4)


Baker, Beth. The Greening of Utilities. *Bioscience* 49(No.8, August 1999): 612-. Biologists are making a difference at electric utilities across the United States. (v10,#4)


Baker, Katharine K., "Consorting with Forests: Rethinking Our Relationship to Natural Resources and How We Should Value Their Loss," *Ecology Law Quarterly* (Berkeley: School of Law of the University of California) 22 (no. 4, 1995):677-728. "The destruction of natural environments causes harm to people because it weakens their connections to the natural world. The quantification of nonuse value measures the extent of that harm. Contingent valuation (CV) is the only accessible vehicle thought capable of such quantification" (p. 714). Responses to four principal criticisms of contingent valuation. "To properly assess nonuse value, the law must reconceptualize the human loss associated with natural resource damage as an emotional injury to the person, not a deprivation of a property right. The loss associated with environmental degradation is the loss that humans experience when their subjective connection to the environment is damaged. The legitimacy of compensating for this loss requires recognizing that the injury does not involve the loss of any individual resource's intrinsic value, but is instead people's sense of loss associated with the destruction of ecosystems. When irreplaceable natural communities are destroyed, the human connection to nature has been injured. Contingent valuation, the current means of assessing the psychological injury associated with natural resource loss, is a crucial vehicle for measuring damages because it allows people to assess their own subjective sense of loss" (p. 728). Baker is professor of law, Chicago-Kent College of Law. (v.10,#2)

Baker, Katherine K. "Consorting with Forests: Rethinking Our Relationship to Natural Resources and How We Should Value Their Loss." *Ecology Law Quarterly* 22(no.4, 1995):677. (v7,#1)

Baker, Nathan. "Water, Water, Everywhere, and at Last a Drop for Salmon? NRDC v. Houston Heralds New Prospects Under Section 7 of the Endangered Species Act." *Environmental Law* 29(No. 3, 1999):607-. Mr. Baker discusses Natural Resources Defense Council v. Houston's potential to revolutionize federal water delivery programs in the Pacific Northwest. He concludes that this recent Ninth Circuit decision will lead to greater protection of imperiled salmon and other listed species in the Pacific Northwest, because the Bureau of Reclamation will be required to increase consultation with the fish and wildlife agencies on the effects of its various projects in the region. (v10,#4)


Bakken, Peter W., Joan Gibb Engel, and J. Ronald Engel, *Ecology, Justice, and Christian Faith: A Critical Guide to the Literature*. Westport, CT: Greenwood Press, 1995. This book can be obtained at 40% discount = $33 (instead of $55 list price) from Greenwood Press Order Line 1-800-225-5800. Have credit card information ready. Refer to code #F308 to qualify. Part one is "Critical Survey: The Struggle to Integrate Ecology, Justice, and Christian Faith," a review essay. Part two is a Bibliography Survey, 1961-1993, arranged in eleven categories with 512 entries, each well annotated. There is an author index, a title index, and a subject index. An extensive work, the labor of many years, and valuable for its critical insights. A related work is Joseph K. Sheldon, *Rediscovery of Creation: A Bibliographical Study of the Church's Response to the Environmental Crisis*, 1992, which has 1,700 references, also a historical overview, but few critical annotations. Bakken is coordinator of outreach for the Au Sable Institute of Environmental Studies. Joan Engel is a free lance writer and Ronald Engel is professor of social ethics, Meadville/Lombard Theological School. (v7,#1)

Bakken, Peter W., *The Ecology of Grace: Ultimacy and Environmental Ethics in Aldo Leopold and Joseph Sittler*. Ph.D. dissertation, University of Chicago, Divinity School, August 1991. An influential articulation of a secular environmental ethic, Leopold's *Sand County Almanac*, invests the natural environment with an aura of ultimacy that grounds that ethic and gives it a subtly but genuinely religious character. A contemporary interpretation of the Christian doctrines of creation, Christ, and grace, in the theology of Joseph Sittler, invests the nonhuman world with a similar aura of ultimacy. Leopold's greater attention to "wildness" can critique Sittler's treatment of grace in nature. But Leopold seems unaware of his dependence on religious or quasi-religious factors, and leaves him unable to provide ultimate answers to the place and role of humans in nature. Christian theology can both be corrected by and add deeper dimensions to Leopold's land ethic. The co-advisors were Robin Lovin and J. Ronald Engel.

Bakken, Peter W., J. Ronald Engel, and Joan Gibb Engel. *Ecology, Justice, and Christian Faith: A Guide to the Literature 1960-1993*. Westport, CT: Greenwood Press, 1995. An annotated bibliography of literature published in English that expresses, analyzes, or critiques Christian perspectives on the relationship between social justice and ecological integrity. There is an introductory review essay followed by over 460 complete annotations by over 250 authors. The annotations focus on works that include each of the following three components: (1) attention to ecological issues such as environmental quality, resource limitations, and biotic diversity; (2) attention to social-ethical values and problems such as distributive justice, community, racism, and sexism; and (3) explicitly theological or religious reflection on ecological and social ethics and their interrelations. (v6,#1)

Bakker, J. I. Hans, "The Gandhian Approach to Swadeshi or Appropriate Technology: A Conceptualization in Terms of Basic Needs and Equity", *Journal of Agricultural Ethics* 3(1990):50-88. This is an examination of the significance of Gandhi's social philosophy for development. It is argued that, when seen in light of Gandhi's social philosophy, the concepts of appropriate technology and basic needs take on new meaning. Gandhi's social philosophy has been neglected by most development specialists. This analysis attempts to draw out some aspects of M. K. Gandhi's background and his thinking about swadeshi (i.e. local self-reliance and use of local knowledge and abilities) and swaraj (i.e. independent development that leads to equity and justice). Bakker is in sociology and anthropology at the University of Guelph, Ontario.


Balbontin, Javier; Penteriani, Vincenzo; Ferrer, Miguel, "Humans act against the natural process of breeder selection: A modern sickness for animal populations?" *Biodiversity and Conservation* 14(no.1, January 2005):179-186(8).


Baldwin, A. Dwight, Judith deLuce (de Luce), and Carl Pletsch, eds., *Beyond Preservation: Restoring and Inventing Landscapes*. Minneapolis: University of Minnesota Press, 1993.

Sample articles: Baldwin, de Luce, and Pletsch, "Ecological Preservation versus Restoration"; William R. Jordan, III, "'Sunflower Forest': Ecological Restoration as the Basis for a New Ecological Paradigm"; Frederick Turner, "The Invented Landscape" (we ought, "when the occasion warrants and the knowledge is sufficient, to create new ecosystems, new landscapes, perhaps even new species" (p. 36); G. Stanley Kane, "Restoration or Preservation: Reflections on a Clash of Environmental Philosophies"; Carl Pletsch, "Humans Assert Sovereignty over Nature"; Dora G. Lodwick, "Changing Worldviews and Landscape Restoration." Baldwin is in geography, de Luce teaches classics, and Pletsch history at Miami University. (v4,#4)

Baldwin, Dwight, Jr., Judith de Luce, and Carl Pletsch, eds., *Beyond Preservation: Restoring and Inventing Landscapes*. Minneapolis: University of Minnesota Press, 1993. The theory of preservation is predicated on the assumption that as humans we are different from and opposed to the rest of nature, but the contributors here explore the belief that humans are inextricably entangled with nature and therefore have an unavoidable impact upon the entire ecosystem. The contributors explore the possibilities of restoring damaged landscapes and even of inventing new ones. The editors are landscape architects at the University of Miami, Ohio. (v4,#2)

"eavesdropping." Plants pick up on volatiles released by nearby plants under herbivore attack and prepare their defenses. And those under attack may release volatiles to draw predators on their attacking herbivores. Such signalling can be better tested now because of our ability to genetically modify "deaf" and "mute" plants.

Baldwin, Jeff, "The Culture of Nature through Mississippian Geographies," & Ethnics and the Environment 11(2006):13-44. The paper's first interest is in re-forming exploitive human-environment relations. It shows that culture/nature dichotomies are not only false, but obscure the commonality of culture to humans and nonhuman beings and processes. The paper draws upon the Roman genesis of "culture" to describe its function in finding appropriateness among co-evolving human and nonhuman projects. Culture, thus, is the process through which co-eval projects are brought together. The study argues that through dialectic interrelationships, culture works to move biospheric relations towards mutualism and away from parasitism (or exploitation). This is evident among nonhuman beings and processes as well as cultures in which humans are more central. The paper draws upon various interrelationships in the Mississippi watershed to illustrate these points. It then briefly explores the usefulness of a culture of nature perspective in planning and managing development projects. Baldwin is in earth and environmental studies, Wilamette University, Salem, Oregon. (Eth&Env)


Balick, Michael J., Elisabetsky, Elaine, Laird, Sarah A., eds. Medical Resources of the Tropical Forest: Biodiversity and Its Importance to Human Health. New York: Columbia University Press 1996. $35 paper. Covers a wide spectrum of subjects in biodiversity, ethnomedicine, ethnobotany, and pharmacology. Regional work ranging from Africa to Asia, from the Caribbean to Central and South America. The most comprehensive survey available of the current literature. The authors call attention to the ways in which the natural habitats of these plants can be protected from damage or destruction. Information on drug discovery efforts, laying the groundwork for a basic pool of knowledge for pharmaceutical companies and smaller-scale entrepreneurs. Ethical issues of intellectual property rights pertaining to tropical resources and their medicinal uses.

Balirwa, JS; et al., "Biodiversity and Fishery Sustainability in the Lake Victoria Basin: An Unexpected Marriage?," Bioscience 53(no.8, 2003):703-716. (v.14, #4)


Ball, Jim. "Evangelicals, Population, and the Ecological Crises," *Christian Scholars Review* 28(No.2, 1998):226-253. The focus of this article is a review and analysis of the population debate in the Evangelical Protestant literature on ecological crises. Six major writings are considered in depth. The conclusion reached is that the literature thus far has provided an excellent introduction, but the ethical consequences of intrinsic value and overconsumption are undeveloped. (v.11,#2)


Ball, Terence, "'The Earth Belongs to the Living': Thomas Jefferson and the Problem of Intergenerational Relations," *Environmental Politics* 9(no. 2, Summer 2000):61-. (v.12,#2)


Balmford, Andrew et al (two dozen others), "The Convention on Biological Diversity's 2010 Target," *Science* 307(14 January 2005):212-213. Short-term, and for people in need or with power, destruction of biological diversity has a beneficial effect on personal well-being. But long-term, conserving biodiversity and the services it provides is essential to human self-interest. How can scientists present information about biodiversity in ways that are useful to making longer-term decisions? Part of the answer is establishing better and more reliable indicators that are rigorous, repeatable, widely accepted, and easily understood. In this respect economists have long had a set of common and clear indicators that track markets. Ecologists need something similar.

Balmford, Andrew et al (eighteen others), "Economic Reasons for Conserving Wild Nature," *Science* 297(9 August 2002):950-953. "On the eve of the World Summit on Sustainable Development, it is timely to assess progress over the 10 years since its predecessor in Rio de Janeiro. Loss and degradation of remaining natural habitats has continued largely unabated. However, evidence has been accumulating that such systems generate marked economic benefits, which the available data suggest exceed those obtained from continued habitat conversion. We estimate that the overall benefit/cost ratio of an effective global program for the conservation of remaining wild nature is at least 100:1." "Development is clearly essential. However, current development trajectories are self-evidently not delivering human benefits in the way that they should: income disparity world-wide is increasing and most countries are not on track to meet the United Nations' goals for human development and poverty eradication by 2015. ... Retaining as much as possible of what remains of wild nature through a judicious combination of sustainable use, conservation, and, where necessary, compensation for resulting opportunity costs ... makes overwhelming economic as well as moral sense." Balmford is with the Conservation Biology Group, Department of Zoology, University of Cambridge, UK. (v.13,#4)
Balmford, Andrew; Mace, Georgina M.; and Leader-Williams, N. "Designing the Ark: Setting Priorities for Captive Breeding." Conservation Biology 10, no.3 (1996): 719. (v7, #3)

Balogh, James C. and William J. Walker, Golf Course Management and Construction: Environmental Issues. Boca Raton, FL: Lewis Publishers, 1992. The environmental effects of turfgrass in golf courses, lawns, parks, greenways, and similar areas, which are widespread in landscape architecture. Ways that these areas do and do not, can and cannot have environmental benefits, such as recreational, aesthetic, erosion control, green space, and wildlife habitat uses. Balogh is a soil scientist with Spectrum Research, Duluth, MN. Walker is a geochemist at the University of California, Davis. (v7,#1)


Balter, Michael, "The Baby Deficit," Science 312(30 June 2006):1894-1897. As fertility rates decline across the developed world, governments are offering big incentives for childbearing. Experts don't expect them to have much effect. Demographers predict that the E.U. countries will lose between 24 million and 40 million people during each coming decade. Replacement level total fertility rates in European countries are 2.1 children per couple, and nearly all the world's industrialized countries are below this, some much below. The U.S. is at replacement level. Below replacement levels also mean that a population ages, the proportion of elderly adults relative to the active labor force increases, making a higher economic burden on the active labor force to support the elderly.

On global scales, demographers predict that the world's total population will continue to increase for decades to come, rising from its current 6.5 billion to somewhere between 8 and 11 billion by 2050. But nearly all of the increase will be in developing countries.

Balvanera, Patricia et al (eight others), "Conserving Biodiversity and Ecosystem Services," Science 291(2001):2047. A lead editorial in Science. "Above all, we must remember that biodiversity is in serious jeopardy for a reason: namely, that the opportunity costs of conservation are perceived to be too high. The best hope for biodiversity is to create and align diverse incentives for conservation wherever possible and to integrate these into the larger policy-making arena." (v.12,#2)

Bammel, Gene, "Which World? Which Wilderness? or Getting Back to the Right Cronon," International Journal of Wilderness 7 (no. 2, August 2000):16-19. William Cronon is a heretic. But heretics often serve as useful correctives. Heretics serve to bring the orthodox back to their roots. Perhaps Crononism will serve to bring true believers in wilderness back to the bedrock of their belief and practice. Bammel is emeritus professor of philosophy, West Virginia University. (v.12,#4)


Bandeira, Fabio; Martorell, Carlos; Meave, Jorge; Caballero, Javier, "The role of rustic coffee plantations in the conservation of wild tree diversity in the Chinantec region of Mexico," Biodiversity and Conservation 14(no.5, May 2005):1225-1240(16).


Bao Qingde, "Replacement and Transformation: Sustainable Development and the Evolution of the Conception of Development." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol. 3, no. 4 (December 30, 2000). Abstract: The idea of sustainable development represents a major shift in people's conception of development. Its essence is a thorough replacement and innovative transformation of peoples' values regarding social development. The focus of this paper is to clarify the origins of the idea of sustainable development and its connotation, and to give an overview of such issues as the evolution of people's conception of development. In Chinese. (EE v.12,#1)

Bar-Ilan University Library maintains, on computer disk, a list of all the publications, with abstracts, known in Hebrew and English, on environmental ethics in Judaism, and this can be made available either on disk or in printout (about 80-100 pages when printed). (Israel) (v5,#1)


Barbanell, Edward Morris, Private Property and Common-property Arrangements: The Case of Water in the West, Pd.D. thesis, Department of Philosophy, University of Utah, 1999. Private ownership is not the preferred end state for all scarce resources, illustrated by water in the American West. Because of water's "factor endowments", e.g., its degrees of jointness, divisibility and excludability, one individual's use creates significant negative externalities for other users. Individuals' interests can be better protected by splitting the various rights of ownership between individual resource users and the "resource community" to which they belong. This dissertation offers an expanded framework of "ownership", or rights-relationships. Locke's account of property is inadequate for water and other resources with similar factor endowments. Economists often conflate "open access" with "common ownership." The former describes a state of affairs where there are no rights-relationships at all, whereas the latter denotes a situation where definite property rights have been established. When the rights-relationship among members of a resource community is based on shared expectations of reciprocal behavior, then a common-property arrangement can function effectively to control the overuse of scarce resources. The advisor was Bruce Landesman. (v.13,#4)
Barbato, Joseph and Lisa Weinerman, eds., *Heart of the Land: Essays on the Last Great Places*. New York: Pantheon Books, 1994. 297 pages. A Nature Conservancy sponsored book. Thirty essays by well-known nature writers about places that still retain the ability to inspire, to awe, and to fire our collective imaginations. The essayists find that such places move us in ways that we intuitively understand but cannot adequately explain. Samples: Terry Tempest Williams, "Winter Solstice at the Moab Slough (Colorado Plateau, Utah)"; Rick Bass, "On Willow Creek" (Texas Hill Country); Joel Achenbach, "The Most Patient of Animals" (Clinch Valley, Virginia). "Of course we shouldn't protect a wild core such as the Texas hill country because it is a system still intact with the logic and sanity that these days too often eludes our lives in the city. We should instead protect the hill country simply for its own sake, to show that we are still capable of understanding (and practicing) the concept of honor: loving a thing the way it is, and trying, for once, not to change it" (Rick Bass). Barbato is an editorial director at the Nature Conservancy; Weinerman is with Nature Conservancy in Latin America. (v7,#1)


Barber, Charles Victor. "Forest Resource Scarcity and Social Conflict in Indonesia," *Environment* 40(no. 4, May 1998):4-. As economic tensions escalate and unsustainable logging practices continue, the risk of civil violence in Indonesia is rising. (v9,#2)


Barbier, Edward B., "The Concept of Sustainable Economic Development," *Environmental Conservation* 14(no. 2, Summer, 1987):101-110. Sustainable development is perhaps a difficult concept to define with analytical rigor but it is nevertheless a useful concept. One makes an effort to maximize simultaneously goals in three areas (1) Biological system goals, such as genetic diversity, resilience, biological productivity; (2) Economic system goals, such as satisfying basic needs, reducing poverty, equity-enhancing, increasing useful goods and services; and (3) Social system goals, such as cultural diversity, institutional sustainablility, social justice, and participation. This forces tradeoffs, since all these goals cannot at once be maximized, and optimum solutions can be sought. Barbier is with the International Institute for Environmental and Development, London.


Barbour, Ian G., "The Churches and the Global Environment," CTNS (Center for Theology and the Natural Sciences) Bulletin 16 (No. 3, Summer 1996):1-9. A response to Al Gore's *Earth in the Balance*. We are not isolated individuals but are constituted by our relationship as persons-in-community, and we are part of a wider created order. ... Stewardship can easily be distorted
into care for nature merely for the sake of the benefits it confers on us. Barbour taught religion and science at Carleton College, Northfield, Minnesota. (v7,#4)

Barbour, Ian G., "Experiencing and Interpreting Nature in Science and Religion," Zygon 29(1994):457-487. Three paths from nature to religious interpretation: (1) From religious experience in the context of nature. (2) Scientific findings concerning cosmology or evolution used as evidence of design. (3) Traditional religious beliefs reformulated in the light of current natural science. All three can contribute to relating science and religion. Barbour is in physics and religion at Carleton College, emeritus. (v5,#4)


Barclay, Oliver R., "Animal Rights: A Critique," Science and Christian Belief, vol. 4, no. 1, pp. 49-61. A broader and more soundly established Christian approach than that of "animal rights" (in Andrew Linzey, Tom Regan, and others) will find responsibilities for and duties to animals in the context of those to the whole creation. The term "animal rights" is inappropriate for animals. It is best abandoned for these more satisfactory and Biblically-based concepts. There is a positive mandate given to humans to care for the whole natural world. Barclay is a zoologist. (v4,#3)

Barcott, Bruce. AKill the Cat that Kills the Bird?@ New York Times Magazine (December 2, 2001): 46-51. Jim Stevenson shot a feral cat that was about to kill a piping plover, an endangered species on an estuary in Galveston Bay, Texas. He was taken to court on charges of cruelty to animals. But the case resulted in a hung jury and was dismissed. Barcott=s article cites J. Baird Callicott and Holmes Rolston III, siding with the endangered species and against the cat lovers.


Barling, David , *A Food Supply Chain Governance And Public Health Externalities: Upstream Policy Interventions and the UK State*, @ *Journal of Agricultural and Environmental Ethics* 20(2007):285-300. Contemporary food supply chains are generating externalities with high economic and social costs, notably in public health terms through the rise in diet-related non-communicable disease. The UK State is developing policy strategies to tackle these public health problems alongside intergovernmental responses. However, the governance of food supply chains is conducted by, and across, both private and public spheres and within a multilevel framework. The realities of contemporary food governance are that private interests are key drivers of food supply chains and have institutionalized a great deal of standards-setting and quality, notably from their locations in the downstream and midstream sectors. The UK State is designing some downstream and some midstream interventions to ameliorate the public health impacts of current food consumption patterns in England. The UK State has not addressed upstream interventions towards public health diet at the primary food production and processing stages, although traditionally it has shaped agricultural policy. Within the realities of contemporary multilevel governance, the UK State must act within the contexts set by the international regimes of the Common Agricultural Policy and the World Trade Organization agreements, notably on agriculture. The potential for further upstream agricultural policy reform is considered as part of a wider policy approach to address the public health externalities issuing from contemporary food supply chains within this multilevel governance context. Keywords:
The State - agricultural policy and public health - food governance - World Health Organization. Barling is at Centre for Food Policy, City University, London, UK.

Barlow, Chuck D., "Why the Christian Right Must Protect the Environment: Theocentricity in the Political Workplace," The Boston College Environmental Affairs Law Review 23 (no. 4, Summer, 1996):781-. Originally a LL.M. (Master of Laws) thesis, in the environmental law and natural resources program at the Northwestern School of Law of Lewis & Clark College, Portland, Oregon, December 1995. The faculty advisor was Professor William Funk. Analyzes the rise of the Christian right as a force in American political policy, demanding adherence to traditional Biblical values. The Christian right has taken, at best, an indifferent, and at worst, a heavily anthropocentric attitude toward the use and conservation of the environment. Barlow rebuts the proposition, asserted by Lynn White, Jr., Aldo Leopold, and others, and implicitly accepted by the environmental inaction of the Christian right, that the scriptures of the Judeo-Christian tradition promote an anthropocentric environmental ethic. Rather, the Bible sets forth a "theocentric," or God-centered, approach to care of the environment. Those who claim to base their political agenda on Christianity ought to consider the Biblical mandate to use the earth's resources wisely. Address: Chuck D. Barlow, c/o Phelps Dunbar, L.L.P., P.O. Box 23066, Jackson, MS 39225-3066. (v7,#4)

Barlow, Chuck D., Why the Christian Right Must Protect the Environment: Theocentricity in the Political Workplace, LL.M. (Master of Laws) thesis in the environmental law and natural resources program at the Northwestern School of Law of Lewis & Clark College, Portland, Oregon, December 1995. The faculty advisor was Professor William Funk. The thesis analyzes the rise of the Christian right as a force in American political policy, demanding adherence to traditional Biblical values. The Christian right has taken, at best, an indifferent, and at worst, a heavily anthropocentric attitude toward the use and conservation of the environment. Barlow rebuts the proposition, asserted by Lynn White, Jr., Aldo Leopold, and others, and implicitly accepted by the environmental inaction of the Christian right, that the scriptures of the Judeo-Christian tradition promote an anthropocentric environmental ethic. Rather, the Bible sets forth a "theocentric," or God-centered, approach to care of the environment. Those who claim to base their political agenda on Christianity ought to consider the Biblical mandate to use the earth's resources wisely. The thesis will be published in The Boston College Environmental Affairs Law Review, Summer, 1996. Chuck D. Barlow, c/o Phelps Dunbar, L.L.P., P.O. Box 23066, Jackson, MS 39225-3066. (v7,#1)


Barnard, Helen. Nature, Human Nature and Value. Ph.D. Dissertation, Cardiff University, 2006. The main concern of environmental philosophy has been to find value for nature. This thesis links a theory of nature, a theory of human nature and a theory of value. A definition of nature is explored, requiring a brief history of the concept of nature. There has been a decline of teleological explanations and the development of two main contemporary explanations of human nature in relation to nature: Ultra-Darwinism (a reductionist explanation of human nature) and postmodernism. An analysis of these two positions shows that neither has an adequate metaphysics for finding value in nature, and this is revealed by an examination of two different types of environmental philosophy influenced respectively by the two opposing views. The problem of values is discussed with particular emphasis on moral values. An argument for objective values based on objective knowledge is put forward as well as a theory of human nature which leads to the conclusion that teleological explanations link a theory of nature, a theory of human nature, and a theory of value more satisfactorily than the non-teleological explanations of Ultra-Darwinism and postmodernism. This conclusion is relevant to the problems of the environment. The advisor was Robin Attfield.


Barnea, A., and Nottebohm, Fernando. A Seasonal Recruitment of Hippocampal-Neurons in Adult Free-Ranging Black-Capped Chicadees.@ Proceedings of the National Academy of Sciences of the United States of America Vol. 91, no. 23 (1994): 11217-21. Chickadees develop new neurons before the stress of winter, hiding food before onset of winter and needing new neurons to remember where to find it. Interestingly, chickadees living in the wild produce double the number of neurons of chickadees that are kept as captive birds. Does wild nature builds better brains, or at least better bird brains? Similar studies have found that the brains of lions kept in zoos have much degenerated. The authors are in the Field Research Center for Ecology and Ethology at Rockefeller University.


the problems facing our communities, federal, state, and local, including environmental quality.  


Barr, James. *Biblical Faith and Natural Theology*. Oxford: Clarendon Press, 1993. 244 pages. Writing against the background of the rejection of natural theology by prominent twentieth century theologians (especially Karl Barth), Barr, well-known for his biblical exegesis, argues that natural theology is a legitimate enterprise within biblical thought. Any religious claim, no matter how strongly defended as revealed, includes some element of "anterior knowledge" that arises out of what has traditionally been viewed as natural theology. Natural theology is an essential and lively component of Biblical faith. Unfortunately, Barr chooses not to bring his new regard for natural theology to bear in any substantial way on the new discussions of the
world and nature prompted by the ecological crisis. Barr presented these as Gifford lectures in 1991; an earlier Gifford lecturer denying natural theology was Karl Barth in 1938. (v6,#3)


Barrett, Alan, Lawlor, John, Scott, Sue. The Fiscal System and the Polluter Pays the Principle: A Study of Ireland. Brookfield, VT: Ashgate, 1997. 240 pp. $63.95. The Irish fiscal system examined to see if the incentives generated by the taxes and subsidies are environmentally positive or negative. Are polluters being taxed in a way that makes them pay for their damage? Barrett, Alan, Lawlor, John, Scott, Sue, eds. The Fiscal System and the Polluter Pays Principle. Brookfield, VT: Ashgate, 1997. 180pp. $59.95 cloth. The Irish fiscal system is examined to find out if polluters are taxed in a way that makes them pay for their damage, or if they are being subsidised and so effectively encouraged to pollute. The book also suggests possible improvements to the system. The authors are at the Economic and Social Research Institute, Ireland. (v8,#1)

Barrett, Alan, Lawlor, John, Scott, Sue. The Fiscal System and the Polluter Pays the Principle: A Study of Ireland. Brookfield, VT: Ashgate, 1997. 240 pp. $63.95. The Irish fiscal system examined to see if the incentives generated by the taxes and subsidies are environmentally positive or negative. Are polluters being taxed in a way that makes them pay for their damage?

Barrett, CB; Brandon, K; Gibson, C; Gjertsen, H, "Conserving Tropical Biodiversity amid Weak Institutions," Bioscience 51(no. 6, 2001):497-502. (v.13,#1)

Barrett, Christopher B., and Ray Grizzle. "A Holistic Approach to Sustainability Based on Pluralism Stewardship." Environmental Ethics 21(1999):23-42. In this paper, we advance a holistic ecological approach based on a three-compartment model. This approach favors policy initiatives that lie at the intersection of the three major areas of concern common to most environmental controversies: environmental protection, provision of basic human needs, and advancing economic welfare. In support of this approach, we propose a "pluralistic stewardship" integrating core elements of anthropocentrism, biocentrism, and ecocentrism. After presenting the basics of our model, we then explain why it is important to identify and promote a holistic ecological approach to sustainability. Here we employ the economic concept of path dependence, emphasizing that there exist multiple paths society can follow in environmental ethics and policy.
but once one has been chosen, implicitly or explicitly, there may be little opportunity to reverse such choices. (EE)


Barringer, Felicity, "Unusual Alliance Is Formed to Clean Up Mine Runoff, New York Times, August 18, 2004, A13. In Utah unexpected alliances (ski resort operators, businesses, the U.S. Forest Service, and environmental groups) are co-operating to clean up the U.S. West, where mining waste has polluted the headwaters of 40 percent of all watersheds. (v. 15, # 3)

Barringer, Felicity, "A Search for Pearls of Wisdom in the Matter of Swine," New York Times, July 7, 2004, p. A4. Pig farms in eastern North Carolina produce massive wastes in land, water, and air and have become one of the most politically divisive issues in the state. During the 1990's the number of hogs grew from three to over nine million. Systems to deal with the waste, using lagoons and spraying treated wastes onto fields--the wastes do contain phosphorus and nitrogen, the main ingredients in fertilizer--has repeatedly failed. The EPA has done little and the State of North Carolina has mandated a study to which industry has contributed $ 18 million. That study, two years overdue, is about to be released, lead by C. M. Williams of North Carolina State University. The better the solutions are, the more expensive they are. (v. 15, # 3)
Barringer, Felicity, "Forest Service Seeks Limits on All-Terrain Vehicles," New York Times, July 8, 2004, p. A12. The U.S. Forest Service is proposing that ATV's must stay on established trails, rather than drive anywhere they please, creating "outlaw" trails. Such non-trails now cover five times as many miles as the proper trails. ATV riders particularly like the challenge of steep slopes and this creates much erosion. ATV use has increased sevenfold in the past thirty years. Some of the 155 National Forests already require staying on trails, but many do not. ATV use has increased sevenfold in the past thirty years. One rider, asked about the appeal of riding in the mud, said, "I like getting muddy. If you haven't gotten muddy, you haven't ridden." (v. 15, # 3)


Barringer, Felicity, "U.S. Rules Out Dam Removal To Aid Salmon," New York Times, December 1, 2004, p. A1. The Bush administration has ruled out removing any dams on the Columbia and Snake Rivers to save endangered salmon species, even as a last resort. Previous Clinton administration policy has stated that dam removal might be an option, as a last resort. Authorities now claim it is unrealistic to consider removing dams and that they can solve the problem with better fish ladders and other solutions. (v.14, #4)

Barringer, Felicity, "New Provision Would Allow Slaughtering of Wild Horses," New York Times, November 25, 2004, p. A20. A provision attached to an Omnibus Spending Bill by Senator Conrad Burns, Republican, Montana, would allow the sale for slaughter of feral horses that have been rounded up and are more than ten years old or have been offered for adoption successfully three times. The bill is awaiting final action. There are about 37,000 feral horses and burros running free in ten U.S. Western states; most are in Nevada. The Bureau of Land Management rounds up some when numbers increase and now has about 30,000 horses in holding areas. The feral horses compete with livestock and elk for grass. In some areas of Nevada wild animals, including horses, had consumed two-thirds of the available forage before cattle were let onto the land at the end of winter. This time it is the cattlemen, not the ecologists, who want the horses thinned off the landscape. B.L.M. prefers adoption; over 203,000 horses and burros have been adopted in three decades; about 6,600 were adopted last year. But there are many more horses than persons willing to adopt them. (v.14, #4)

Barringer, Felicity, "U.S. Panel Recommends No Protection for Grouse," New York Times, December 3, 2004, p. A 14. Amid an intense lobbying effort by energy and ranching interests in the U.S. West, a team of Interior department biologists has recommended that the sage grouse, a bird whose sagebrush territory has been vastly reduced by farming and development is not
threatened with extinction and does not for the moment need to be protected under the Endangered Species Act.

Barringer, Felicity, "Steps Taken to Help Eagle Leave Endangered List," New York Times, February 14, 2006. U.S. Fish and Wildlife is resuming efforts to remove the bald eagle from the endangered species list, with cooperation of environmental groups. One problem, raised by developers, is whether two earlier laws protecting the eagle make it even more difficult for developers. Bald eagles in the U.S. numbered 413 breeding pairs in 1963; today there are 7,000-9,000 breeding pairs.

Barro, Susan C.; Manfredo, Michael J.; and Peterson, George L. "Examination of the Predictive Validity of CVM (Contingent Valuation) Using an Attitude-Behavior Framework." Society and Natural Resources 9, no.2 (1996): 111. (v7, #3)

Barrows, Paul L., "Wildlife Health: When to Intervene," Transactions of the Fifty-Seventh North American Wildlife and Natural Resources Conference, 1992, pages 433-438. When is intervention appropriate and to what degree in the treatment of wildlife diseases? Some advocate a laissez faire attitude, let nature take its course; but others believe we ought to rehabilitate each sick, injured, or dying wild bird or animal encountered. Reason and practicality lie between these extremes. Examples of intervention are discussed, both at the individual and population level, also reports from organizations and study symposia on this issue. Colonel Barrows is commanding officer of the U.S. Army Veterinary Command with a special interest in the welfare of wildlife on military reservations. (v5,#4)


Barry, Dwight, and Oelschlaeger, Max. "A Science for Survival: Values and Conservation Biology," Conservation Biology 10(no. 3, June 1996):905-911. Practice of conservation biology that does not actively and continuously question the values that shape it is self-defeating. Conservation biology is inescapably normative. Advocacy for the preservation of biodiversity is part of the scientific practice of conservation biology. Conservation biologists should reflect on the constitutive values underlying their research programs and policy recommendations. Such reflection is itself an inherent element of scientific objectivity and takes into account the social nature of scientific knowledge. Without openly acknowledging such a perspective, conservation biology could become merely a subdiscipline of biology, intellectually and functionally sterile and incapable of averting an anthropogenic mass extinction. Barry is in the School of Forestry and Environmental Studies, Yale University. Oelschlaeger was then in philosophy, University of North Texas, and now is at the University of Northern Arizona. (v.10,#1)


Barry, John. Environment and Social Theory, 2nd ed. London: Routledge, 2007. Barry explores the contested character of the environment and nature within social theory. He examines the way the nonhuman environment plays roles in past thinkers such as Rousseau, Malthus, Marx, Darwin, Mill, Freud, and Horkheimer (and the Frankfort School), as well as contemporary people such as Habermas, Dawkins, Diamond and Lomborg. Barry also discusses the relationship between the environment and gender, postmodernism, risk society schools of thought, and orthodox economic thinking. He concludes with an argument for an interdisciplinary green social theoretical approach to environmental issues.

the nonhuman environment plays roles in past thinkers such as Rousseau, Malthus, Marx, Darwin, Mill, Freud, and Horkheimer (and the Frankfort School), as well as contemporary people such as Habermas, Dawkins, Diamond and Lomborg. Barry also discusses the relationship between the environment and gender, postmodernism, risk society schools of thought, and orthodox economic thinking. He concludes with an argument for an interdisciplinary green social theoretical approach to environmental issues.


Bartholow, John M., Douglas, Aaron J., and Taylor, Jonathan G. "Balancing Hydropower and Environmental Values: The Resource Management Implications of the US Electric Consumers Protection Act and the AWARETM Software." Environmental Values 4(1995):255-270. This paper reviews the AWARETM software distributed by the Electric Power Research Institute (EPRI). The program is designed to facilitate the Federal Energy Regulatory Commission (FERC) license renewal process for US hydropower installations. The discussion reviews the regulatory, legal, and social contexts that give rise to the creation and distribution of AWARETM. The principal legal impetus for AWARETM is the Electric Consumer Protection Act (ECPA) of 1986 that directs FERC to give equal consideration to power and non-power resources during relicensing. The software is reviewed in this paper from several perspectives including those of natural resource economics, systems modeling, and the social context within which FERC licensing decisions are made. We examine both the software and its underlying methodology and find significant problems with each. Because of its flaws, AWARETM does little to further ECPA's equal consideration requirement. We find that the conservation and restoration impact of ECPA for US fisheries could be seriously hampered by the widespread use of AWARETM. KEYWORDS: AWARETM, Electric Consumer Protection Act, hydropower, water resources, Federal Energy Regulatory Commission. Bartholow, Douglas, and Taylor are at the Midcontinent Ecological Science Center, Fort Collins, Colorado. (EV)

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

Bartlein, Patrick J., Whitlock, Cathy, Shafer, Sarah L. "Future Climate in the Yellowstone National Park Region and Its Potential Impact on Vegetation," Conservation Biology 11(no.3, 1997):782. The changes that might result from global warming are difficult to predict but models indicate they will be as great or greater than those seen in the paleoecologic record during previous warming intervals, and will likely exceed the capacities of present species to adjust to them, resulting in communities without any analogue in present-day vegetation. The authors are in geography, University of Oregon. (v8,#2)

Bartlett, Robert V. "Ecological Rationality: Reason and Environmental Policy." Environmental Ethics 8(1986):221-39. Ecological rationality is a concept important to most environmental and natural resources policy and to much policy-relevant literature and research. Yet ecological rationality as a distinctive form of reason can only be understood and appreciated in the context of a larger body of work on the general concept of rationality. In particular, Herbert Simon's differentiation between substantive and procedural rationality and Paul Diesing's specification of forms of practical reason are useful tools in mapping and defining ecological rationality. The significance and characteristics of ecological rationality suggest that it is a fundamental kind of reason, having precedence over others. Bartlett is in the department of Political Science, Purdue University, West Lafayette, IN. (EE)

Bartlett, Robert V., "Ecological Rationality: Reason and Environmental Policy," Environmental Ethics 8(1986):221-239. By analyzing the concept of rationality itself, we can see that one form of rationality ecological rationality—is fundamental, a necessary condition for human social life. (Katz, Bibl # 1)

Bartolommei, Sergio, Etica e Ambiente, Guerini e Associati s.r.l., Via A. Sciena 7, 20135 Milano, Italy, sec. ed., 1990. L. 25,000. 187 pages. An Italian work on environmental ethics. (v2,#1)


Barton, Harry, "The Isle of Harris Superquarry: Concepts of the Environment and Sustainability," Environmental Values 5(1996):97-122. In 1991 Redland Aggregates Ltd. put forward a proposal to embark upon the largest mining project in Europe, the chosen location being the remote island of Harris and Lewis in the Western Isles of Scotland. The proposal sparked off an impassioned debate between planners, conservationists and developers, while the local residents have attempted to come to terms with an operation on a scale previously
inconceivable on the island. This paper attempts to examine the proposed development from a sociological angle. It is less concerned with justifying or condemning the project on economic or political grounds and more with analyzing the roots of the various viewpoints held by those involved, willingly or unwillingly, in the debate. From this analysis arise implications regarding different perspectives on the environment and different interpretations of the term sustainable. It is argued that these diverse perceptions are grounded in different interpretations of the environment, shaped by the cultural and historical context within which the groups or individuals that hold these views exist and interact. Ultimately, the paper makes a plea for a wider recognition of the diversity of meanings and interpretations implied by the term environment, a broader definition of the term development, and an expansion of the concept of sustainability to incorporate the variety of situations and perceived needs of different cultures. KEYWORDS: Cultural theory, empowerment, Isle of Harris, sustainability (EV)

Bascompte, Jordi, Pedro Jordano, and Jens M. Olesen, "Asymmetric Coevolutionary Networks Facilitate Biodiversity Maintenance," Science 312 (21 April, 2006): 431-433. In a study of pollinators and fruit-eating birds in forests in Spain, the authors find mutualistic webs but with asymmetric dependency. A plant may require a particular bird to distribute its seed (strong dependency) but that bird may eat the seeds of many kinds of plants (weak dependency), generalists versus specialists. The argument is that this mutualistic asymmetry tends to stabilize the coevolution of the whole ecosystemic network. The lead author is an ecologist in Seville, Spain. With commentary, John H. Thompson, "Mutualistic Webs of Species," Science 312 (21 April, 2006): 372-373.

Ecology does not provide information that is relevant to management and policy.


Baskin, Yvonne, "Ecologists Dare to Ask: How Much Does Diversity Matter?" Science 264(April 8, 1994):202-203. Report from a workshop, sponsored by SCOPE/Global Biodiversity Assessment Synthesis Conference, in California earlier this year, on whether or how much diversity contributes to healthy ecosystem functioning. Mixed opinions, but it seems clear that some species are "rivets" (in Ehrlich's metaphor) in the Earth spaceship system, while others are only "passengers." Biodiversity is valuable up to a certain point (which may differ with different systems), but most ecosystems contain more diversity than is needed to reach peak productivity. See related item in issues section, below. (v5,#1)


the world's leading ecologists. She explains the practical consequences of declining biodiversity on ecosystem health and function. (v8,#2)


Bate, Jonathan, *Romantic Ecology: Wordsworth and the Environmental Tradition*. New York: Routledge, 1991. "Modern ecological politics teaches us that to consider society only in terms of production, income, and ownership is insufficient. What is done to the land is as important as who owns it" (p. 46). "It is profoundly unhelpful to say there is no nature at a time when our most urgent need is to address and readdress the consequences of human civilisation's insatiable desire to consume the products of the earth" (p. 56). "The whole concept of society having an economic base with legal and political superstructure fails to address the fact that the economy of human society may in the end be dependent on something larger, the economy of nature" (p. 57).


Bates, H.E., Parker, Agnes Miller. *Through the Woods: The English Woodland--April to April*. London: Frances Lincoln, 1995 (distributed by Trafalgar Square, North Promfet, VT 05053; 800 423 4525. The playwright H.E. Bates took his turn in the 1930's at praising the beauty of the English land in a delightfully observant journal of woodsy rambles. *Through the Woods* has been reissued with its original woodcuts by Agnes Miller Parker. (v7,#1)

Bates, Jennifer. "An Inquiry into the Nature of Environmentally Sound Thinking." Environmental Ethics 25(2003):183-197. Many philosophers advocate a change in our thinking in order to move beyond an anthropocentric view of the environment. In order to achieve the kind of thinking that makes for sound environmental thinking, we have to look more deeply into the nature of thought and to revise the relation between thought directed outward to the world and thought directed inwardly to thought itself. Only with such insight can we begin to think soundly about the environment. Thought exhibits a characteristic that makes it hard to think environmentally soundly. This characteristic is the inability to think of something without at the same time making it one's property. In other words, if sound environmental thinking means moving beyond anthropocentric attitudes and, for example, extending moral categories to creatures other than humans, then we need to address how our thinking turns everything into "mine" before we go about establishing a theory about how that extension should take shape. Hegel is the philosopher who most deeply analyses the inevitable, yet dangerous role of "mining" Cin the sense of "making mine," in the act of thinking. This potentially problematic character of thought risks making a number of otherwise sound environmental ways of thinking, unsound. However, we can provide a balance for this problematic characteristic in our thinking.

(EE)

Bates, Sara F., David H. Getches, Lawrence J. MacDonnell, and Charles F. Wilkinson, *Searching Out the Headwaters: Change and Rediscovery in Western Water Policy.* Washington, DC: Island Press, 1993. 250 pages. Paper, $ 17.95. Western water use and the outmoded rules that govern it. Only by understanding the waters of the West and the people whose lives depend upon then can concerned citizens comprehend the seriousness of the current situation and help take steps toward reform. The authors are at the University of Colorado School of Law. (v4,#2)

Batie, SS, " Managing Pesticide Tradeoffs," *Environment* 43(no. 8, 2001):40-44. (v.13,#1)


Baubosa, Joao Lopes, *O Homem no Universo. Reflexao sobre possíveis implicações éticas da coincidência antrópica cosmológica* (Man and Universe. Study on the possible implications of the cosmological anthropic coincidence), Faculdade de Letras da Universidade de Lisboa, 2000. M.A. thesis on cosmology and environmental ethics. This study is about the ethical implications of the cosmological anthropic principle and of John Gribbin's theory that defends the Universe as alive. These two theories, both based on the cosmological anthropic coincidence, have been put forward during the last four decades and are cosmological conceptions about the place of man and intelligent life in the Universe, having strong ethical implications. However, only the ethical implications of the anthropic principle's weak version are really acceptable because only this version has scientific credibility, being able to play an important role in environmental ethics. (v.12,#4)

Bauckham, Richard, "Joining Creation's Praise of God," *Ecotheology* 7 (No 1 July 2002):45-59. In the Bible and the Christian tradition an important aspect of the way the relationship of God, humanity and other creatures is understood is the idea that all creatures praise God and humans are to join in the praise offered by the other creatures. This theme has been misunderstood and neglected in the modern period. We should avoid distorting it in an hierarchical and anthropocentric direction, as happens in the idea that humans are the priests of creation. Instead this theme should act as a strong corrective to hierarchical and anthropocentric views of creation. It puts us among, rather than over the creatures, and encourages us to be helped in our own praise of God by appreciating the value other creatures have for God. Francis of Assisi and the eighteenth-century poet Christopher Smart are fine exemplars of the way humans may join creation's praise.

Bauer, Joanne, ed. Forging Environmentalism: Justice, Livelihood, and Contested Environments. Armonk, NY: M.E. Sharpe, 2006. Through a five-year multinational study, Bauer brings together eight case studies of industrial pollution and nature protection in China, Japan, India, and the US, along with commentary articles. The case studies include air pollution in Benxi (China), wetlands preservation in the Sanjiang Plain (China), industrial water pollution in Minamata Bay (Japan), power generation versus nature preservation at Lake Biwa and the Nagara River (Japan), industrial air pollution in Delhi (India), fisheries management in Kerala (India), hazardous oil pollution in Grand Bois (US), and the development of the eco-community of Civano (US). The commentaries on the case studies represent an attempt to understand values cross-nationally in China, Japan, India, and the US and include: (1) AThe Value of Legality in Environmental Action@ by Sheila Jasanoff, (2) AEnvironmental Transformation and the Values of Modernity@ by Arun Agrawal, (3) AEvaluating Environmental Justice Claims@ by Robert Melchior Figueroa, (4) AFraming Shared Values: Reason and Trust in Environmental Governance@ by Clark A. Miller, and (5) AHow Shall We Study Environmental Values?@ by Joanne Bauer and Anna Ray Davies.

Baulch, Helen, "Fish Fight," Alternatives 25(no. 4, Fall 1999):4-. Alien salmon in Lake Huron keep anglers happy, but threaten native lake trout. (v10,#4)

Baulch, Helen. "Clear-cutting the Ocean Floor." Alternatives 25(No.3, Summer 1999):7-. Trawling gear devastates the world's continental shelves. (v10,#4)

Bauman, Whitney A. "The AEco-Ontology@ of Social/ist Ecofeminist Thought." Environmental Ethics 29(2007):279-298. The epistemological and ontological claims of social/ist ecofeminist thought (a combination of social and socialist ecofeminism) are moving away from the dichotomy between idealism and materialism (both forms of colonial thinking about humans and
the rest of the natural world). The social/ist ecofeminists have constructed a postfoundational Aeco-ontology of nature-cultures (Haraway) in which the ideal and the material are co-agents in the continuing process of creation. Given that contemporary public discourse in the United States on the topic of environmental issues is still heavily shaped by Christian theology and metaphors, changing or challenging this discourse must also mean speaking theologically. Based upon an understanding of social/ist ecofeminist Aeco-ontology, a new understanding of God (ideal) and Creation (material) can be constructed which suggests that God is a human horizon that helps reconnect (religion/re-ligare) Christian humans with the rest of the natural world and with the many human Aothers of different religious traditions. In this construction, Carolyn Merchant's understanding of humans as Apartners with nature and Catherine Keller's postcolonial critique of the Christian doctrine of creation out of nothing are the most helpful.

Bauman, Zygmunt. Consuming Life. Cambridge: Polity Press, 2007. Bauman examines the impact of consumerist attitudes and patterns of conduct on communities and partnerships, identity building, politics and democracy, the production and use of knowledge, and social divisions and stratifications. He discusses the invasion and colonization of human relations by the worldviews and behavioral patterns shaped and inspired by commodity markets and the sources of dissent, resentment, and resistance to occupying forces.

Baumgartner, Christoph, "Exclusion by Inclusion? On Difficulties with Regard to an Effective Ethical Assessment of Patenting in the Field of Agricultural Bio-Technology." Journal of Agricultural and Environmental Ethics 19(2006):521-539. In order to take ethical considerations of patenting biological material into account, the so-called "ordre public or morality clause" was implemented as Article 6 in the EC directive on the legal protection of biotechnological inventions, 98/44/EC. At first glance, this seems to provide a significant advantage to the European patent system with respect to ethics. The thesis of this paper argues that the ordre public or morality clause does not provide sufficient protection against ethically problematic uses of the patent system within the area of life. On the contrary, there are worrisome obstacles to any effective and comprehensive critical analysis of the ethical aspects of bio-patenting, especially in the field of agriculture. These obstacles can be seen as indirect consequences of the implementation of ethical considerations in form of the ordre public and morality clause in the EC Directive. Therefore, Article 6 of the EC Directive on the legal protection of biotechnological inventions seems to ultimately weaken the position of ethics in the debate concerning bio-patenting because the ordre public and morality clause is usually interpreted in an exclusively bio-ethical way in the sense of an "intrinsic ethics," which is primarily interested in questions regarding the moral status of particular entities. It is argued that an important cause of this phenomenon is that the decisive reasons against bio-patenting are concerns of social ethics, and not bio-ethics. Keywords: agricultural bio-technology - EC bio-patenting directive-ethics - ordre public and morality clause - patents. Baumgarter is in the Faculty of Arts and the Humanities/Theology, University of Utrecht, Utrecht, The Netherlands. (JAEE)

Baumslag, David, "Choosing Scientific Goals: The Need for a Normative Approach," Studies in the History and Philosophy of Science 29(no. 1, 1998):81-96. One needed normative goal is that appreciation of nature should be a goal of science equally with understanding of nature. Environmental philosophy has helped to shift the goals of science in this direction. Baumslag is in philosophy, University of Calgary, Alberta, Canada.


Bauston, Lorri. "Seven Billion Reasons to Go Vegetarian." The Animals' Agenda 16(Jul. 1996):35. (v7,#2)

Bautista, LM; García, JT; Calmaestra, RG; Palacín, C; Martín, CA; Morales, MB; Bonal, R; Vinuela, J, "Effect of Weekend Road Traffic on the Use of Space by Raptors," Conservation Biology 18(no.3, 2004):726-732. (v. 15, # 3)


Bavington, Dean, "The Iatronic Effects of Environmental Management: Servicing a Needy Nature?" Faculty of Environmental Studies Occasional Papers, York University, Ontario, Canada, vol. 4, no. 1, September 1998. An "iatrogenic" effect in medicine is when an intended cure makes things worse. Environmental management can intend to fix, but in fact make things worse. Bavington is at York University. (v.13,#1)


Bawe, Laurens. "Private Profit at Public Expense: The Bakun Hydroelectric Project", The Ecologist 26(no.5, 1996):229. In 1993, the Malaysian government revived its plans for a huge hydroelectric project in Sarawak, Malaysia--the Bakun dam--and announced that it would be built with private (rather than public) money. Private finance has not been forthcoming, however. Direct and indirect government subsidies are now bailing the project out. Many Malaysians have expressed concern at the consequences of "privatization" in the country and the ways in which Bakun has entrenched unaccountable political-corporate networks.

Baxter, Brian, Ecologism: An Introduction. Edinburgh: Edinburgh University Press, and Washington: Georgetown University Press, 2000. Articulates and defends "ecologism"--an ideology that has grown from the developing interest in the moral, political, economic, and scientific issues centering on human relationships with the environment. Ecologism starts from the position that the non-human world is worthy of moral consideration and that this should be taken into account in the ordering of social, economic and political systems. Ecologism is a major development in environmental politics and, increasingly, a significant alternative to existing political philosophies. A comprehensive and systematic survey of the main components ecologism, examining elements which have been neglected in the existing literature. (v.11,#2)

Baxter, Brian H., "Naturalism and Environmentalism: A Reply to Hinchman," Environmental Values 15(2006): 51-68. The values which are definitive of the humanist project, such as freedom and self-determination, are of central concern to environmentalism. This means, according to Lewis P. Hinchman, that environmentalists should seek a rapprochement with humanism, rather than rejecting it for its apparent anthropocentrism. He argues that this requires in turn the acceptance of those approaches to human self-understanding which are central to the hermeneutic traditions and the rejection of naturalist approaches, such as sociobiology, which is accused of producing deterministic, reifying, reductionist, dehumanising forms of understanding of human beings and human life. This paper seeks to show that sociobiology does not pose the kinds of threat to humanism and environmentalism outlined by Hinchman. (EV)

Baxter, Brian H., "Ecocentrism and Persons," Environmental Values 5(1996):205-219. Ecocentrism has to establish an intrinsic connection between its basic value postulate of the non-instrumental value of the nonhuman world and a conception of human flourishing, on pain of failure to motivate acceptance of its social and political prescriptions. This paper explores some ideas recently canvassed by ecocentrists such as Robyn Eckersley, designed to establish this connection--transpersonal ecology, autopoietic value theory and ecofeminism--and finds them open to objection. An alternative approach is developed which concentrates on the connection between non-human nature and personhood, via the phenomenon of culture. Persons are conceived of as essentially culture-creators, and the fact of their embodiment in ecosystems is argued to be essential to their activities as culture creators. The variety and integrity of such
systems thus turns out to be essential for the flourishing of what is essential to personhood. This means that ecocentrism has to be abandoned in its pure form, and replaced with person-centrism, but this conclusion is argued for on the basis of the extension of the concept of the self—a strategy often endorsed by ecocentrists themselves. KEYWORDS: Ecocentrism, environmental ethics, intrinsic value theory, persons (EV)

Baxter, Brian. "Environmental Ethics - Values or Obligations? A Reply to O'Neill." Environmental Values 8(1999):107-112. ABSTRACT: Onora O'Neill recently argued that environmental ethics could and should be reformulated in terms of a search for the obligations held by moral agents towards each other, with respect to the non-human world. The more popular alternative, which seeks to establish the intrinsic value of the non-human, is plagued with various theoretical difficulties attaching to the concept of value. It is here argued that O'Neill's attempt to determine fundamental obligations of moral agents on the basis of a non-universalisability criterion does not succeed. It is further claimed that such an approach, in spite of the advantages which O'Neill sees it as having, is itself open to serious objection from the viewpoint of environmental ethics, especially as human beings are able in principle to release each other from mutual obligations. It is concluded that, in spite of the difficulties involved, postulations of (intrinsic) value to non-human nature do seem to be indispensable to environmental ethics. KEYWORDS: Environmental ethics, obligations, values, universalisability. Brian Baxter Political Science and Social Policy University of Dundee Dundee DD1 4HN, UK. (EV)


Bayet, Fabienne, "Overturning the Doctrine: Indigenous People and Wilderness—Being Aboriginal in the Environmental Movement." Social Alternatives 13(no. 2, July, 1994):27-32. There is no such thing as wilderness in Australia and has not been for millennia. "The whole of Australia is an Aboriginal artefact" (p. 28). "Wilderness', in this [European] perspective, denotes land which is wild, uninhabited, or inhabited only by wild animals. Such conceptions of wilderness and conservation are yet another form of paternalism and dispossession if they continue conceptually to remove Aboriginal people from the Australian landscape" (p. 27).
Bayet is an Australian Aboriginal and in research at the Aboriginal Research Institute, University of South Australia. (v.9,#3)


Beacham's Guide to Environmental Issues and Sources. 5 volumes; 3,350 pages; 40,000 citations. 39 chapters in entries varying from 35 to 150 pages. $ 240. Claims to be the only comprehensive bibliography related to environmental issues worldwide, organized by topic and by type of source for useful access. Beacham Publishing, Inc., 2100 S Street, N. W., Washington, DC 2008. 800/466-9644. Fax 202/234-1402. (v4,#3)


Beamish, Richard. Getting the Word Out in the Fight to Save the Earth. Baltimore: John Hopkins University Press, 1995. An instruction manual on how environmental and not-for-profit organizations can use existing avenues of mass communication to maximum effect. How any non-profit citizens group can expand and activate its membership, pressure government officials, use the news media, and shape public policy in the fight to save the earth. Beamish is a communications consultant. (v7,#1)

Bean, Michael J., Rowland, Melanie. The Evolution of National Wildlife Law, 3rd ed. Westport, Ct.: Praeger Publishers, 1997. $75 cloth, $28 paper. Since the second edition of 1983, intense interest in wildlife law has been matched only by a greatly increased level of litigation within the field and by the amount of new legislation enacted. This third edition thoroughly re-examines the field and provides a comprehensive review. (v8,#3)


Beans, Bruce E., Eagle's Plume: Preserving the Life and Habitat of America's Bald Eagle. New York: Scribner, 1996. $ 25. Even among the millions of Americans who seem to care that the eagle survives, there is an almost total lack of information about its natural history and present status. (v7,#4)


Beardsley, Tim, "Where Science and Religion Meet" Profile of Francis S. Collins, Director of the National Human Genome Research Institute. Scientific American 278 (no. 2, February 1998):28-29. The head of the U.S. human genome project is a conservative Christian who worries that the resulting genetics will be used for unjustified abortions, of fetuses who have what prospective parents judge to be undesirable traits, such as a genetic disposition to obesity. Humans have an innate sense of right and wrong that "doesn't arise particularly well" from evolutionary theory, but has religious origins. One needs much ethical sensitivity facing the possibilities in human genetics. (v.9,#3)


Bearnet is (was) edited by Margaret Pettis, issued periodically as an update on bear welfare throughout the United States and Canada, sometimes elsewhere, with particular attention to bear hunting, to Animal Damage Control measures, and on bear recovery plans. The current issue contains news from Washington, Oregon, Alaska, B.C., California, Nevada, Utah, Idaho, Colorado, Wyoming, New Mexico, Texas, Florida, Virginia, Pennsylvania, Maryland, New York, New Hampshire, Michigan, and Ontario. Bearnet, Box 72, Hyrum, UT 84319. (v5,#1) Now discontinued.

Beatley, Timothy, Manning, Kristy. The Ecology of Place: Planning for Environment, Economy, and Community. Covelo, CA: Island Press, 1997. 225 pp. $25. Policy and development issues that affect a community--from its economic base to its transit options, to the ways in which its streets and public spaces are managed--and examine the wide range of programs, policies, and creative ideas that can be used to turn the vision of sustainable places. (v9,#2)
Beatley, Timothy. *Ethical Land Use: Principles of Policy and Use*. Johns Hopkins University Press, 1994. 352 pages, $55.00; $17.95 paper. All land-use decisions--from interstate highways to lawn chemicals--involve ethical choices. Analyzes and describes issues faced by individuals and policy makers. Sections include: ethical framework; market perspectives, harm, rights, distributive obligations, duties, future generations; individual liberties; community and politics; concluding principles. (v5,#2)


Beauchamp, E. G., "Animals and Soil Sustainability", *Journal of Agricultural Ethics* 3(1990):89ff. Domestic livestock animals and soils must be considered together as part of an agroecosystem which includes plants. Soil sustainability may be simply defined as the maintenance of soil productivity for future generations. There are both positive and negative aspects concerning the role of animals in soil sustainability. The key component for a fully compatible and acceptable association between domestic animals and soil productivity is proper management. Careful management of the components of an animal-based agroecosystem is required if soil productivity and environmental quality are to be maintained. Beauchamp is in land resource science at the University of Guelph, Ontario.


Becher, Anne, ed., *American Environmental Leaders: From Colonial Times to the Present*, 2 vols. Santa Barbara, CA: ABC-CLIO, 2000. 921 pages in the two volumes. $ 175.00. Almost 350 American environmental leaders, typically with a two-page introductory and summary article. Many historical figures, although most of the leaders portrayed are alive today. Includes the most visible movers and shakers but also those who importantly collaborate on conservation efforts from behind the scenes. Scientists, activists, government personnel, business leaders, lawyers, poets, farmers, economists. Among the philosophers and theologians (and cousins): Wendell Berry, J. Baird Callicott, John B Cobb, Bill Devall, Wes Jackson, Bryan Norton, Holmes Rolston, Rosemary Radford Ruether, Theodore Roszak, George Sessions, Donald
Worster. Each entry has a springboard bibliography. This is a good one to encourage your library to buy. (EE v.12,#1)


Beck MW; Heck, KL; Able, KW; Childers, DL; Eggleston, DB; Gillanders, BM; Halpern, B; Hays, CG; Hoshino, K; Minello, TJ, "The Identification, Conservation, and Management of Estuarine and Marine Nurseries for Fish and Invertebrates," Bioscience 51(no. 8, 2001):633-642. (v.13,#1)


Beck, Roy, and Kolankiewicz, Leon, "The Environmental Movement: Retreat from Advocating U.S. Population Stabilization (1970-1998): A First Draft of History", Journal of Policy History 12, No 1, 2000. "The years surrounding 1970 marked the coming of age of the modern environmental movement. As that movement approaches its fourth decade, perhaps the most striking change is the virtual abandonment by national environmental groups of U.S. population stabilization as an actively-pursued goal. To begin to understand why that shift has occurred and the significance of that shift, it will be important to review the 1970-era movement and its population roots." The article then examines in detail the events leading to abandonment of domestic population stabilization efforts by major environmental organizations. ZPG and Sierra Club are used as case studies. Important for analyzing immigration policy. The published (short) version can be ordered from: NumbersUSA, 1601 N. Kent St., #1100, Arlington, VA 22209. (703) 816-8820. E-mail: info@numbersusa.com. In addition, the entire article is on the web at http://www.numbersusa.com/cgi/text.cgi?Jph. (v.11,#2)


Beck, Ulrich and Mark A. Ritter translator. Ecological Enlightenment: Essays on the Politics of the Risk Society. Atlantic Highlands, NJ: Humanities Press, 1994. In the sequel to Risk Society Beck now examines the politics of that risk society. He starts from the assumption that the ecological issue, considered politically and sociologically, is a systematic, legalized violation of fundamental civil rights and, from this position, adduces that the ecological conflict is the successor to the industrial conflict. Beck is at the Ludwig-Maximilians University, Munich. (v7,#1)

Becker, Christian and Reiner Manstetten, "Nature as a You: Novalis' Philosophical Thought and the Modern Ecological Crisis," Environmental Values 13(2004):101-118. This paper aims to introduce the German Romantic poet Novalis into the discussion of the modern ecological crisis. In particular we examine Novalis' unique philosophy of nature as a You in which he deals with both of the two aspects of the relationship between humans and nature: their original identity as
well as the distinction between them. We analyse the way in which Novalis understood the relationship between nature and humankind dynamically, and show the significance of his concept of poetry for this question. This concept is analysed and described in respect to its principal features: creativity and love. The former is regarded by Novalis as a general capacity of humans as well as an expression of nature itself. Together with love it forms the base for a possible harmonious relationship between humans and nature. We furthermore interpret Novalis' economic thought against the general background of his philosophy of nature and his understanding of humankind. Novalis recognises the crucial role economic action plays in the relationship between nature and humankind and he offers some important insights into this issue. Finally, we discuss the relevance of Novalis' concept of nature as a You for environmental philosophy. By comparison with other concepts of nature in the modern environmental debate, we show how Novalis' thought offers a new perspective on the human-nature relationship and thus fruitful stimulation for today's environmental philosophy.

Becker is in the Interdisciplinary Institute for Environmental Economics, University of Heidelberg. Manstetten is at the Alfred-Weber-Institute, University of Heidelberg. (EV)

Becker, Gerhold K., and James P. Buchanan, eds., Changing Nature's Course: The Ethical Challenge of Biotechnology. Hong Kong: Hong Kong University Press, 1996. 220 pages. Paper, US $ 19.00 ISBN 962-209-403-1. Hong Kong University Press, 139 Pokfulam Road, Hong Kong. Phone 852 2550 2703 Fax 852 2875 0734. Biotechnology marks a new scientific revolution. It holds the promise of generating resources to meet human needs in the fight against hunger, disease and environmental disasters. However, critics argue that biotechnology will jeopardize evolution and add incalculable, self-made risks to the fragile conditions of life on this plant. (v7,#4)

Beckerman, Wilfred, "'Sustainable Development': Is it a Useful Concept?" Environmental Values 3(1994):191-209. It is argued that 'sustainable development' has been defined in such a way as to be either morally repugnant or logically redundant. 'String sustainability, overriding all other considerations, is morally unacceptable as well as totally impractical and 'weak' sustainability, in which compensation is made for resources consumed, offers nothing beyond traditional economic welfare maximization. Apart from a few small developing countries heavily dependent on minerals or other finite primary products, the measurement of some wider concept of 'sustainable' GNP is a waste of time and such estimates as have been made are virtually worthless. KEYWORDS: Environmental policy, intergenerational justice, measurement of GNP, optimality, social discount rate, sustainability constraints, sustainable development, welfare maximization. Beckerman is at Balliol College, Oxford, U.K. (EV)

Beckerman, Wilfred, Pasek, Joanna, "Plural Values and Environmental Valuation," Environmental Values 6(1997):65-86. ABSTRACT: The paper discusses some of the criticisms of contingent valuation (CV) and allied techniques for estimating the intensity of peoples preferences for the environment. The weakness of orthodox utilitarian assumptions in economics concerning the commensurability of all items entering into peoples choices is discussed. The concept of commensurability is explored as is the problem of rational choice between incommensurate alternatives. While the frequent claim that the environment has some unique moral intrinsic value is unsustainable, its preservation often raises ethical and other motivations that are not commensurate with the values that people place on ordinary marketable
goods. Nevertheless, CV is also claimed to have some advantages and it is concluded that little progress will be made in this area until both sides in the debate recognise what is valid in their opponents arguments. (EV)


Beckerman, Wilfred. "How Would You Like Your 'Sustainability', Sir? Weak or Strong? A Reply to my Critics." Environmental Values 4(1995):169-179. This article concentrates on the Jacobs and Daly criticisms (Environmental Values, Spring 1994) of my earlier article in the same journal (Autumn 1994) criticising the concept of 'sustainable development.' Daly and Jacobs agreed with my criticisms of 'weak' sustainability, but defended 'strong' sustainability on the grounds that natural and manmade capital were 'complements' in the productive process and that economists are wrong, therefore, in assuming that they are infinitely substitutable. This article maintains that they are confusing different concepts of 'complementarity' and 'substitutability.' It is also argued that, in fact, they do both sell crucial passes in their defence of strong sustainability without providing any clear criteria for their abandonment of it in certain cases. It is also denied that the fact that environmental services may provide different satisfactions from those obtained from other goods and services elevates it to the status of some over-riding moral value, or that discounting future costs and benefits is 'unfair' to future generations.
KEYWORDS: discounting, economic welfare, environmental values, inter-generational justice, natural capital, scarce resources, sustainability. Beckerman is at Balliol College, Oxford. (EV)

Beckert, Cristina, ed., Natureza e Ambiente: Representações na Cultura Portuguesa (Nature and Environment: Representations in Portuguese Culture). Lisboa: Centro de Filosofia da Universidade de Lisboa, 2001. Introduction by Viriato Soromenho-Marques. Papers from a symposium held in 1998 at the University of Lisbon. The papers in this anthology show different features of nature and environment in Portuguese culture and were put together in three main groups. The first group regards the way popular Portuguese tradition and contemporary literature conceive the relation between man and nature and how some Portuguese writers and poets predict the environmental crisis we are living now. The second group consists of political and sociological analysis concerning the history of the Portuguese environmental associations and the image of environmental issues released by the media. Finally, the third group concerns nature and environment as philosophical categories and includes papers about the relation between nature and technique, the notion of a "natural community" inherited from Aldo Leopold, along with studies on Kant's aesthetic concept of nature and Portuguese philosophical views on this category. Beckert and Soromenho-Marques are in philosophy at the University of Lisbon. (v.12,#4)

Becket, Fiona, and Terry Gifford, eds. Culture, Creativity and Environment: New Environmentalist Criticism. Amsterdam: Rodopi, 2007. Contents include: (1) AIntroduction@ by Fiona Becket and Terry Gifford, (2) AJourney to the Heart of Stone@ by Val Plumwood, (3) AWhat is (ecological) >nature=? John Stuart Mill and the Victorian Perspective@ by John...
Parham, (4) AFear and Flowers in Anya Gallaccio=s Forest Floor, Keep off the Grass, Glaschu and Repens@ by Judith Rugg, (5) ALike a Ship to be Tossed: Emersonian Environmentalism and Marilyne Robinson=s Housekeeping@ by Hannes Bergthaller, (6) AIn the Mirror of Middle Earth: Langland=s use of the world as a book and what we can make of it@ by Gillian Rudd, (7) APoodles and Curs: Eugenic Comedy in Ibsen=s An Enemy of the People@ by Greg Garrard, (8) AThe Hunter as Nature-Lover: Idyll, aggression and ecology in the German animal stories of Otto Alscher@ by Axel Goodbody, (9) APostcolonialism, Ecocriticism and the Animal in Recent Canadian Fiction@ by Graham Huggan, (10) ABarry MacSweeney=s Moorland Romance@ by Matthew Jarvis, (11) APainting Landscape: Mediating Dislocation@ by Judith Tucker, (12) AModernity and the Politics of Place in Luis Trenker=s Der verlorene Sohn@ by Guinevere Narraway, and (13) AHeidegger and Merleau-Ponty: Ecopoetics and the Problem of Humanism@ by Louise Westling.


Beder, Sharon, Global Spin: Corporate Assault on Environmentalism. White River Junction, Vermont: Green Books, Chelsea Green Publishing Co., 1997, 1998. Large corporations are using sophisticated techniques to change the way the public and politicians think about the environment and to weaken gains made by environmentalists, turning politicians against increased environmental regulation. Among their techniques: employing PR firms to set up front groups that promote the corporate agenda while posing as public interest groups; creating "astroturf"--artificially created grassroots support groups for corporate causes; strategic lawsuits against public participation (SLAPPS); getting corporate-based environmental educational materials into public schools; and funding conservative think tanks. Beder is a lecturer in science and technology studies, University of Wollongong, Australia.


Beekman, Volkert, "Feeling Food: The Rationality of Perception," Journal of Agricultural and Environmental Ethics 19(2006):301-312. Regulatory bodies tend to treat people's emotional responses towards foods as a nuisance for rational opinion-formation and decision-making. This position is thought to be supported by such evidence as: (1) people showing negative emotional responses to the idea of eating meat products from vaccinated livestock; and (2) people showing positive emotional responses to Magnum's "7 sins" marketing campaign. Such cases are thought to support the idea that regulatory communication about foods should abstract from people's emotional perceptions and that corporate marketing of foods should show restraint in capitalizing upon these weaknesses of the heart. This paper, on the contrary, argues that people's emotional perceptions of foods represent valuable sources of knowledge. This argument is developed by making the dominant reception of peoples emotions intelligible by tracing its roots through the history of the Platonic paradigm. Although this paradigm has dominated the philosophical and psychological debate about emotions, the idea that emotions are sources of knowledge has
recently gained force. This paper also traces the historical roots of the alternative Aristotelian paradigm. The cases of meat products from vaccinated livestock and Magnum's 7 sins serve to illustrate this controversy. The paper concludes by showing that a neo-Platonic emphasis on the irrationality of emotions does not contribute to a fruitful discussion about implications of people's perceptions for agricultural and food politics, whereas a neo-Aristotelian account of rational emotions could enable regulatory bodies to engage people in a fruitful process of opinion-formation and decision-making about food production and consumption.

Keywords: cognitivism - emotions - food perception - rationality. Beekman is at the Agricultural Economics Research Institute (LEI), The Hague, The Netherlands. (JAEE)

Beekman, Volkert, "Sustainable Development and Future Generations," Journal of Agricultural and Environmental Ethics 17(2004):3-22. This paper argues, mainly on the basis of Rawls's savings principle, Wissenburg's restraint principle, Passmore's chains of love, and De-Shalit's trans-generational communities, for a double interpretation of sustainable development as a principle of intergenerational justice and a future-oriented green ideal. This double interpretation (1) embraces the restraint principle and the argument that no individual can claim an unconditional right to destroy environmental goods as a baseline that could justify directive strategies for government intervention in non-sustainable lifestyles, and (2) suggests that people's concerns about the deterioration of nature and the environment articulate future-oriented narratives of self-identity that could fuel non-directive strategies to develop further responsibilities towards nearby future generations. Sustainable development, thus, provides sound arguments to restrict people's freedom to follow their own lifestyles, when these lifestyles transgressed the baseline of the restraint principle. However, the individual freedom of choice should not be restricted for any further environmental considerations. Non-directive strategies are thus to stimulate the development of such further responsibilities towards nearby future generations. Keywords: future generations, ideals, justice, sustainable development. Beekman is at the Agricultural Economics Research Institute, The Hague, The Netherlands. (JAEE)

Beekman, Volkert, "Environmental Utilization Space between Science and Politics," Journal of Agricultural and Environmental Ethics 17(2004):293-300. This paper addresses the issue of operationalizing, or quantifying, sustainable development as a practical guideline for day-to-day environmental policy-making. It criticizes attempts at quantifying some environmental utilization space and argues that the uncertainty of scientific knowledge about the unintended environmental repercussions of consumptive choices casts serious doubt about attempts to justify government intervention in non-sustainable lifestyles. Keywords: environment, risks, trust, uncertainty. Beekman is at the Agricultural Economics Research Institute, The Hague, The Netherlands.

Beekman, Volkert, and Frans W. A. Brom, AEthical Tools to Support Systematic Public Deliberations about the Ethical Aspects of Agricultural Biotechnologies, @ Journal of Agricultural and Environmental Ethics 20(2007):3-12. This special issue of the Journal of Agricultural and Environmental Ethics presents so-called ethical tools that are developed to support systematic public deliberations about the ethical aspects of agricultural biotechnologies. This paper firstly clarifies the intended connotations of the term Aethical tools@ and argues that such tools can support liberal democracies to cope with the issues that are raised by the application of genetic modification and other modern biotechnologies in agriculture and food
production. The paper secondly characterizes the societal discussion on agricultural biotechnology and defends the thesis that normative perspectives fuel this discussion, so one cannot come to grips with this discussion if one neglects these perspectives. The paper thirdly argues that no such thing exists as a societal debate in which these issues should be discussed. There are several intertwined debates, and different actors participate in different discourses. Some practical instruments are necessary in order to include the right issues in these debates. These instruments will be coined as ethical tools, since they are practical instruments that can be used (tools) in order to support debates and deliberative structures for a systematic engagement with ethical issues (hence, ethical tools). Finally, the paper clarifies the ethics of these ethical tools and presents the tools as discussed in the remainder of this special issue: 1) tools to include ethical issues in public consultation and involvement; 2) tools to support systematic reflection upon ethical issues in decision-making; and 3) tools to support explicit communication about values in the food chain. Keywords: Ethical tools - GM evaluation - normative perspective - societal debate - values in the food chain - participatory decision-making - communicative space - value pluralism. Beekman is at Agricultural Economics Research Institute, Wageningen University and Research Centre, The Hague, The Netherlands. Brom is at Ethics Institute, Utrecht University, Utrecht, The Netherlands.

Beeman, Randal. "Friends of the Land and the Rise of Environmentalism, 1940-1954." Journal of Agricultural and Environmental Ethics 8(1995):1-16. The rise of the postwar environmental movement is rooted in the development of ecological consciousness within intellectual circles as well as the general public. Though many commentators cite the 1960s as the focal point of the new environmentalism, the ecological ethic had actually evolved by the 1930s in the writings and speeches of both scientists and public commentators. Agricultural conservationists led the way in broadcasting the message of ecology. Friends of the Land, an agriculturally-oriented conservation organization formed in 1940 and active through the 1950s, is an interesting example of how the agricultural community was an integral component in the rise of environmentalism. While Friends of the Land flourished only for a brief period, its goals and the ideas that the group represented illustrate how the ecological ethic was burgeoning by the early-1950s. Furthermore, the history of Friends of the Land is an important chapter in the ongoing quest for ecological agriculture and societal permanence. (JAEE)


Beevers, Paul, Ecocentrism and Misanthropy, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)


Beisner, E. Calvin, Prospects for Growth: A Biblical View of Population, Resources, and the Future. Westchester, IL: Crossway Books, 1990. "Certainly the environment should be protected, but it must be protected for the sake of man, not for its own sake. Anything else is idolatry of nature" (p. 165). "It is man, not the earth or anything else in it, that was created in the image of God. To make man subservient to the earth is to turn the purpose of God in creation on its head" (p. 24). (v5,#1)


Bekoff, Marc, "The Evolution of Animal Play, Emotions, and Social Morality: On Science, Theology, Spirituality, Personhood, and Love," Zygon: Journal of Religion and Science 36(no. 1, December 2001):615-655. How scientists could well benefit from reciprocal interactions with theologians. The evolution of social morality and the ways in which aspects of social play behavior relate to the notion of "playing fairly". Spiritual and religious perspectives are important in our coming to a fuller understanding of the evolution of morality. Animal emotions, the concept of personhood, and our special relationships with other animals, especially
companion animals, help us to define our place in nature, our humanness. The importance of ethological studies, behavioral research in which a serious attempt is made to understand animals in their own worlds. Species other than primates need to be studied. Bekoff advocates a compassionate and holistic science that allows for interdisciplinary talk about respect, grace, spirituality, religion, love, Earth, and God. Bekoff is in biology, University of Colorado, well known for his defense of animal welfare. (v.13,#1)


Bekoff, Marc, "What is a `Scale of Life?'", *Environmental Values* 1(1992):253-256. Mary Midgley's appeal to a scale of life in making decisions about the culling one species of animal rather than another is troublesome and arbitrary. Sociality and intelligence are not reliable indicators of such scale. Bekoff is a biologist at the University of Colorado, Boulder.

Bekoff, Marc, "Jinxed Lynx? Some Very Difficult Questions with Few Simple Answers," *Boulder (Colorado) Daily Camera*, January 24, 1999. The Division of Wildlife released lynx in the Colorado San Juan Mountains in habitat from which they had become extinct, bringing trapped lynx from Canada for release. There is an expected starvation rate of 50% for the released lynx. Bekoff has serious reservations whether the project is well planned, justified in terms of the animal stress and suffering, and involves too much human dominion over nature, and may be "faking nature." Bekoff is a biologist, University of Colorado, Boulder. The article is on website: http://www.bouldernews.com/opinion/columnists/mark.html.

Later update: Four of the thirteen Canada lynxes released in an effort to restore the 18 to 25 pound wildcats to Colorado have starved to death as of mid-April. The Colorado Division of Wildlife's three year, three-quarter million dollar project has been severely criticized from its inception for its lack of scientific rigor and for its failure to respect the individual animals used for restoration purposes. Both animal rights advocates and environmentalists have criticized the project. Reed Noss (former editor of *Conservation Biology*) has called the project "pathetic"and wrote: "A variety of data and modeling approaches are available to investigate the biological feasibility of reintroducing lynx to Colorado. The state agency chose to ignore the potential of a habitat modeling approach, and instead is rushing in with untested reintroduction of animals. This action suggests that their motivations are political, not biological or ethical. Nevertheless, I hope the project works and that the animals survive and establish a breeding population." University of Colorado biologist, Marc Bekoff objects to the 50% possible mortality rate of the released lynx and to the lack of adequate evaluation of food resources for the animals. He argues that it is irrelevant that these Canadian lynx would likely die anyway at the hands of trappers because "just because animals might be killed one way doesn't justify killing them in other ways." The issue is politically tricky because property rights advocates and ranchers opposed the restoration effort as well. They fear Endangered Species Act restrictions on their uses of property and display a general dislike of predators. See "4th Lynx Dies In State's Effort At Restoration," *NY Times* (4/14/99): A20. Contact: bekoffm@spot.Colorado.EDU. See also an
editorial of Bekoff's at: http://www.bouldernews.com/opinion/columnists/mark.html. See also Lloyd, Jillian, "When Saving a Species Proves To Be Hard on the Animals," Christian Science Monitor, Mar 11, 1999, p. 2. (v.10,#1)


Bekoff, Marc, Minding Animals Awareness, Emotions, and Heart. Foreword by Jane Goodall. New York: Oxford University Press, 2002. A tour of the emotional and mental world of animals, where creatures do amazing things. Bekoff has spent the last 30 years studying animals--from coyotes in Wyoming to penguins in Antarctica. Grooming and gossip, self-medication, feeding patterns, dreaming, dominance, and mating behavior, elephants mourning a dead group member. Animal cognition, intelligence, and consciousness, examples of animal passions, highlighting the deep emotional lives of our animal kin. Conclusions about human humility and duties of animal protection, respect, grace, compassion, and love for all animals. Bekoff is in biology, University of Colorado.  (v.13,#1)


Here'a a sampling of articles:
--Bissell, Steven J., "Hunting in the United States," pages 201-2
--Landsell Herbert, "Nonrightist's View [of Hunting]," pages 277-78.
--Linzey, Andrew, "Animal Theology," pages 283-84, and several other articles on Religion and Animals.
Bekoff, Marc, "Redecorating Nature: Deep Science, Holism, Feeling, and Heart," *BioScience* 50 (no. 8, August 2000):635. "To make science more attractive to students, creative, passionate, and bold dreaming needs to be reinforced in the scientific arena. ... Questioning science and deepening and broadening its scope are healthy moves toward a world in which magnificent nature--her deep and rich sensuality, her beneficence, her complexity--will be respected, cherished, and loved." Bekoff is in Environmental, Population, and Organismic Biology, University of Colorado, Boulder. (v.11,#3)

Bekoff, Marc, *Strolling with Our Kin: Speaking for and Respecting Voiceless Animals*. New York: Lantern Books, 2000. Foreword by Jane Goodall. We can and ought help save and heal animal lives; we can stroll with our kin by acting on behalf of them. Addressed to youth and children. (v.11,#3)


Bekoff, Marc, and Ned Hettinger, "Animals, Nature, and Ethics," *Journal of Mammalogy* 75(1994):219-223. A reply to Howard, see above. Howard is unnecessarily combative, lacking in detail, unbalanced, and poorly argued. His vague platitudes to not help in understanding the variety of ethical issues that arise from the diverse uses of animals. For example, nature has no death ethic, nor can nature have one. An ethic that permits any use of animals by humans that causes them less suffering or allows them a longer life than is typical for animals is far too weak. Superficial appeals to nature's brutality to justify the treatment of nonhumans will not do.
Bekoff is in biology at the University of Colorado; Hettinger in philosophy at the College of Charleston. (v5,#4)

Bekoff, Marc, "Beastly Passions," New Scientist No. 2236, 29 April 2000, pages 32-35. Besotted whales, ecstatic iguanas and embarrassed chimps have persuaded Marc Bekoff and other biologists that we humans are not alone in our passions. (v.11,#3)

Bekoff, Marc, "Deep Ethology, Animal Rights, and the Great Ape/Animal Project: Resisting Speciesism and Expanding the Community of Equals," Journal of Agricultural and Environmental Ethics 10(1997/1998):269-296. ABSTRACT. In this essay I argue that the evolutionary and comparative study of nonhuman animal (hereafter animal) cognition in a wide range of taxa by cognitive ethologists can readily inform discussions about animal protection and animal rights. However, while it is clear that there is a link between animal cognitive abilities and animal pain and suffering, I agree with Jeremy Bentham who claimed long ago the real question does not deal with whether individuals can think or reason but rather with whether or not individuals can suffer. One of my major goals will be to make the case that the time has come to expand The Great Ape Project (GAP) to The Great Ape/Animal Project (GA/AP) and to take seriously the moral status and rights of all animals by presupposing that all individuals should be admitted into the Community of Equals. I also argue that individuals count and that it is essential to avoid being speciesist cognitivists; it really doesn't matter whether "dogs ape" or whether "apes dog" when taking into account the worlds of different individual animals. Narrow-minded primatoocentrism and speciesism must be resisted in our studies of animal cognition and animal protection and rights. Line-drawing into "lower" and "higher" species is a misleading speciesist practice that should be vigorously resisted because not only is line-drawing bad biology but also because it can have disastrous consequences for how animals are viewed and treated. Speciesist line-drawing also ignores within species individual differences. KEY WORDS: Cognitive ethology, animal cognition, The Great Ape Project (GAP), The Great Ape/Animal Project (GA/AP), Community of Equals, speciesism, moral individualism, animal rights. (JAEE)


Bekoff, Marc, "Redecorating Nature: Reflections on Science, Holism, Community, Humility, Reconciliation, Spirit, Compassion, and Love," Human Ecology Forum 7(no. 1, 2000):59-67. "Holistic and heart-driven compassionate science needs to replace reductionist and impersonal science. I argue that creative proactive solutions drenched in deep caring, respect, and love for the universe need to be developed to deal with the broad range of problems with which we are confronted. ... My vision is to create a world-wide community in which humans perceive themselves as a part of nature and not apart from her, in which humans who are overwhelmed and whose spirits and souls have been robbed and squelched by living in and amongst steel, concrete, asphalt, noise, and a multitude of invasions of their private space reconnect with raw nature. ... Nature is our unconditional friend and reconnecting with nature can help overcome
alienation and loneliness. The power of love must not be underestimated as we forge ahead to reconnect with nature."


Bekoff, Marc, "Minding Animals, Minding Earth: Old Brains, New Bottlenecks," *Zygon: Journal of Science and Religion* 39(2003):911-941. "I emphasize the importance of broadening behavioral, ecological, and conservation science into a more integrative, interdisciplinary, socially responsible, compassionate, spiritual, and holistic endeavor. I stress the significance of studies of animal behavior, especially ethological research concerned with animal emotions in which individuals are named and recognized for their own personalities, for helping us to learn not only about the nonhuman animal beings with whom we share Earth but also about who we are and our place in nature. We are best understood in relationship with others. To this end I develop the notion of `minding animals' and `deep ethology.' Animals are sources of wisdom, a way of knowing." Bekoff is in biology, University of Colorado, Boulder. (v.14, #4)


Bekoff, Marc. "Deep Ethology." *The AV Magazine*, Winter 1998, pp. 10-19. Based on years of research and personal experience, Bekoff presents a straightforward and inspiring account of his scientific beliefs and moral convictions regarding nonhuman animals. He defines "deep ethology" as "naming and bonding with animals and expanding the Community of Equals." The article summarizes Bekoff's views on the nature of animal minds and well-being, and on how animals should be treated by humans. Bekoff is a biologist at the University of Colorado, Boulder. (v9,#2)


Belanger, L; Grenier, M, "Agriculture intensification and forest fragmentation in the St. Lawrence valley, Quebec, Canada," *Landscape Ecology* 17(no.6, 2002): 495-507.

Bell, Barbara Currier. "Humanity in Nature: Toward a Fresh Approach." *Environmental Ethics* 3(1981):245-57. Human beings have always been preoccupied with the relationship between humanity and nature, and imaginative literature reflects that preoccupation. The group of views about humanity in nature to be found there is strikingly pluralistic, contrary to the simple "pro" and "con" set to which the environmental debate is often reduced. The richness, however, is not easy to appreciate. In this essay I argue for a new approach to understanding views about the relationship between humanity and nature, one that transcends the conventional terms for such analysis and emphasizes plurality. The approach has ethical dimensions: it aims at strengthening both our hope and our ability to find a better relationship with nature. Bell resides in Southport, CT. (EE)


Bell, Derek. "Environmental Justice and Rawls' Difference Principle." *Environmental Ethics* 26(2004):287-306. It is widely acknowledged that low-income and minority communities in liberal democratic societies suffer a disproportionate burden of environmental hazards. Is "environmental injustice" a necessary feature of liberal societies or is its prevalence due to the failure of existing liberal democracies to live up to liberal principles of justice? One leading version of liberalism, John Rawls' "justice as fairness," can be "extended" to accommodate the concerns expressed by advocates of environmental justice. Moreover, Rawlsian environmental justice has some significant advantages over existing conceptions of environmental justice. (EE)


Bell, Philip J.P., "Contesting rural recreation: the battle over access to Windermere," *Land Use Policy* 17(no.4, OCT 01 2000):295- . (EE v.12,#1)

Bell, R. G., Stewart, J. B., and Nagy, M. T., "Fostering a Culture of Environmental Compliance through Greater Public Involvement," *Environment* 34-44, 2002 (v.13,#4)

Bell, Ruth Greenspan, "Building Trust: Laying A Foundation For Environmental Regulation In The Former Soviet Bloc," *Environment* 42 (No. 2, 2000): 20-. Formulating effective environmental laws in the countries in transition from totalitarianism to democracy involves developing critical institutions and creating a climate of trust in the law-drafting process. (v.11,#2)
Bella, David A. "The Pressures of Organizations and the Responsibilities of University Professors", *Bioscience* 46(no.10, 1996):772. (v7,#4)

Bellesiles, Michael A., *Arming America: The Origins of a National Gun Culture* New York: Knopf, 2001. Contrary to the gun-toting myth, "gun ownership was exceptional in the seventeenth, eighteenth, and early nineteenth centuries, and guns became a common commodity only with the industrialization of the mid-nineteenth century" and the militarization of American during the Civil War. Prior to that soldiers routinely entered combat with swords, pikes, or even hoes. Pioneers ate meat from the woods, but snared it; guns and bullets were inefficient, clumsy, and expensive. Muskets often exploded, gunpowder could not be used in the rain, and were difficult to aim. Hunting with guns was an upper class activity. The Kentucky marksmen that could outshoot the British are mythology. The Western shoot-ups of the movies are pure fiction. The gun culture was created by gun entrepreneurs, such as Samuel Colt. As is no surprise, Bellesiles has lots of critics. (v.12,#2)

Later: Bellesiles has been accused of such careless scholarship that he was forced to resign as professor of history at Emory University. See Olsen, Florence, "Bellesiles Resigns from Emory after University Report Questions his Research for Book on Guns," *Chronicle of Higher Education, Daily News* (daily on line edition, not the printed Chronicle), October 28, 2002.


Bello, Walden. "Neither Market Nor State: The Development Debate in South-East Asia", *The Ecologist* 26(no. 4,1996):167. Fast track capitalism has brought huge growth rates for the newly-industrialized countries of Asia. But the assertion that such rapid growth is due to free trade and free market policies is a myth. The explanation lies in a combination of protection, state intervention and a massive infusion of Japanese capital following the relocation of Japanese companies to South-East Asia in search of cheap labor. As a result, the region's economies are now subordinate to, and dependent on, Japan. (v7,#4)


Bellows, Anne C., "Exposing violences: Using women's human rights theory to reconceptualize food rights," *Journal of Agricultural and Environmental Ethics* 16(2003):249-279. Exposing food violences - hunger, malnutrition, and poisoning from environmental mismanagement - requires policy action that confronts the structured invisibility of these violences. Along with the hidden deprivation of food is the physical and political isolation of critical knowledge on food violences and needs, and for policy strategies to address them. I argue that efforts dedicated on behalf of a human right to food can benefit from the theoretical analysis and activist work of the international Women's Rights are Human Rights (WRHR) movement. I introduce the United
Nations' early Declaration (1948) and Covenant (1966) language on the human right to food and review problems of household access and grassroots engagement that are "written into" this early documentation. A case study set in Poland across the transition from (more) Communist to (more) capitalist political economies attempts to illuminate the discussion through a grounded example. KEY WORDS: cold war, food policy, food security, group rights, human rights, Poland, political and economic rights, right to food, transition, women's rights. (JAEE)


Belovsky, GE; Botkin, DB; Crowl, TA; Cummins, KW; Franklin, JF; Hunter Jr, ML; Joern, A; Lindenmayer, DB; MacMahon, JA; Margules, CR; Scott, JM, "Ten Suggestions to Strengthen the Science of Ecology", BioScience 54 (no.4, 2004): 345-351(7). There are few well-documented, general ecological principles that can be applied to pressing environmental issues. When they discuss them at all, ecologists often disagree about the relative importance of different aspects of the sciences original and still important issues. It may be that the sum of ecological science is not open to universal statements because of the wide range of organizational, spatial, and temporal phenomena, as well as the sheer number of possible interactions. We believe, however, that the search for general principles has been inadequate to establish the extent to which generalities are possible. We suggest that ecologists may need to reconsider how we view our science. This article lists 10 suggestions for ecology, recognizing the many impediments to finding generalizations in this field, imposed in part by the complexity of the subject and in part by limits to funding for the study of ecology.


"To philosophize about the environment is to reason about nature, and about our various concerns and involvements with the natural world. But this isn't a simple one-way procedure, for we are, of course, a part of nature, not distinct from it, and our concerns are themselves an upshot of natural procedures. Moreover, reason itself is hardly autonomous; it too, is something that has evolved within the natural world, and even if we are still able still to speak, somewhat archaically, of the faculty of reason, we only mistakenly believe that it might operate alone in determining what we think, and what we do. There is no reason to think we can or should be wholly reasonable beings. To philosophize about the environment, then, we need to take the complexity of our own natures fully into account" (p. viii).
"The longest part of the book deals with one of the central questions in environmental philosophy: that of what sorts of things are of direct moral concern. ... I begin with animals, arguing that they matter at least in so far as they are sentient. ... As far as non-sentient life forms are concerned, the claim is that even if we agree, as well we might, that such things have a good of their own, are able to be benefited or harmed, and can flourish or decline, still none of this gives us reason to promote their well-being or further their ends" (pp xi-xii). Belshaw is in philosophy, The Open University, Milton Keynes, UK. Reviewed by D. J. Philippon in Progress in Human Geography 27(no. 3, 2003):382. (v 14, #3)


Ben-Ari, Elia T. Better than a Thousand Words. Bioscience 49(No.8, August 1999):602-. Botanical artists blend science and aesthetics. (v10,#4)

Ben-Ari, Elia T., "A Throbbing in the Air," Bioscience 49(No.5, 1999):353-. The discovery of infrasonic communication among elephants has given researchers a whole new way of hearing things. (v.10,#2)

Ben-Ari, Elia T., "Defender Of The Voiceless: Wallace Stegner's Conservation Legacy," Bioscience 50 (No. MAR 01 2000): 3-. (v.11,#2)


Benari, Ella T., "Not just slime," Bioscience 49 (No. 9, 1999 Sep 01): 689-. Beneath the slippery exterior of a microbial biofilm lies a remarkably organized community of organisms. (v.11,#4)
Benatar, David. "Why the Naive Argument against Moral Vegetarianism Really is Naive," Environmental Values 10(2001):103-112. When presented with the claim of the moral vegetarian that it is wrong for us to eat meat, many people respond that because it is not wrong for lions, tigers and other carnivores to kill and eat animals, it cannot be wrong for humans to do so. This response is what Peter Alward has called the naive argument. Peter Alward has defended the naive argument against objections. I argue that his defence fails. Keywords: Vegetarianism, naive argument. Benatar is at the Philosophy Department, University of Cape Town, South Africa. (EV)

Benda, LE; Poff, NL; Tague, C; Palmer, MA; Pizzuto, J; Cooper, S; Stanley, E; Moglen, G, "How to Avoid Train Wrecks When Using Science in Environmental Problem Solving," Bioscience 52(no.12, 2002)


Bender, William H. "How Much Food Will We Need in the 21st Century?" Environment 39(1997):6. Focusing on the future demand for food rather than the supply suggests ways of feeding more people with less environmental damage. (v8,#1)

Bendik Keymer, Jeremy, The Ecological Life: Discovering Citizenship and a Sense of Humanity. Lanham, MD: Roman and Littlefield, 2006. A humanistic perspective on environmental philosophy that challenges some dogmas of deep ecology and radical environmentalism while speaking for their best desires. Written as a series of lectures, the book argues that being human-centered leaves us open to ecological identifications, rather than the opposite. Draws on analytic and continental traditions, as well as literature and visual media. Environmental philosophy needs a sense of ecological justice consonant with human rights. Bendik-Keymer is in philosophy, Dept of International Studies, American University of Sharjah, United Arab Emirates.

Bendik-Keymer, Jeremy, "Analogical Extension and Analogical Implication in Environmental Moral Philosophy," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001):149-158. Two common claims in environmental moral philosophy are that nature is worthy of respect and that we respect ourselves in respecting nature. In this paper, I articulate two modes of practical reasoning that help make sense of these claims. The first is analogical extension, which understands the respect due human life as the source of a like respect for nature. The second is analogical implication, which involves nature in human life to show us what we are like. These forms of reasoning are relevant to environmental virtue ethics in that both help us conceptualize how respect for nature can be part of our sense of humanity, and not opposed to our sense of humanity. (v.13,#2)


Benestad, Olav, "Energy Needs and CO$_2$ Emissions: Constructing a Formula for Just Distributions," *Energy Policy* 22(no. 9 1994):725-734. Countries differ substantially in their capabilities to limit future emissions of CO$_2$. Fairness, or equity, should be seen against the background of these differences. Benestad proposes an "Equal burden" formula for emissions, based on John Rawls theory of justice, showing how quotas given according to needs may be operationalized for different sectors and different countries in a comprehensive way, and with the net result that atmospheric concentrations do not increase. Benestad was with the Centre for Development and the Environment, University of Oslo, Norway, until his death. (v.10,#1)


Bengston, David N. and Xu, Zhi., *Changing National Forest Values: A Content Analysis*. USDA Forest Service General Technical Report NC-323, 1995. 29 pages. The authors identity four ways in which people value forests and forest ecosystems: (1) economic/utilitarian, (2) life support, (3) aesthetic, and (4) moral/spiritual. These values are either instrumental, where the good is equated with some desirable human end, or non-instrumental, the worth of something seen as an end in itself. It is important to separate values from objects-of-value. "Objects of value are the things that we care about or think are important, values are the ways in which we care about those things. Values are a conception of what is good about objects of value. Confusion between values and objects of value is common because the dividing line between these two concepts is subjective and dependent on how the terms are defined" (p. 6). Report produced at the U.S. Dept. of Agriculture, Forest Service, North Central Forest Experiment Station, 1992 Folwell Ave., St. Paul, MN 55108. (v.9,#4)

Bengston, David N., "Changing Forest Values and Ecosystem Management," *Society and Natural Resources* 7(1994):515-533. We are currently in a period of rapid and significant change in forest values. Forest managers must address the questions: (1) What is the nature of forest values? Can all forest values be reduced to a single dimension, as assumed in utilitarian-based traditional forestry and economics, or are these values multidimensional and incommensurate? (2) What specific values are involved? (3) What is the structure of these values? How are they related to each other in value systems? (4) How and why have forest values changed over time? (5) What do changing forest values imply for ecosystem management? Bengston is with the USDA Forest Service, North Central Forest Experiment Station, St. Paul, MN. (v.10,#1)

include anthropocentric, biocentric, and moral/spiritual/aesthetic orientations toward forests. Computer coded content analysis was used to identify shifts in the relative importance of these value orientations over the period 1980 through 2001. The share of expressions of anthropocentric forest value orientations declined over this period, while the share of biocentric value expressions increased. Moral/spiritual/aesthetic value expressions remained constant over time. The observed shifts in forest value orientations have implications for identifying appropriate goals for public forest management and policy, developing socially acceptable means for accomplishing those goals, and dealing with inevitable conflict over forest management. Bengston is at the North Central Research Station, USDA Forest Service, St. Paul, MN. Webb is with the Social Sciences Program, Bureau of Rural Studies, Agriculture, Fisheries, Forestry--Australia, in Canberra. (EV)

Bengston, David N. and Fan, David P. l. "The Public Debate about Roads on the National Forests: An Analysis of the News Media, 1994-98." Alternatives 25(No.3, Summer 1999):4- . The debate about forest roads as expressed in news stories reflects the changing social context in which the Forest Service must overhaul its policy. Some of the conflicting views are predictable, but the debate among recreational users is surprising. (v10,#4)


Bennett, David H., "Triage as a Species Preservation Strategy," Environmental Ethics 8(1986):47-58. The use of selective preservation for species is seen as basically unethical. Either it selects appropriate species on the basis of human instrumental use, or it makes the logical/ethical flaw of treating collectives as individuals. If triage is ethical, it is so only as applied to individuals. (Katz, Bibl # 1)

Bennett, David H. "Triage as a Species Preservation Strategy." Environmental Ethics 8(1986):47-58. In this paper I discuss what triage is and how it might be applied to the preservation of endangered species. I compare the suggested application of triage to endangered species with its application to wartime military practice, distribution of food aid, and human population control to show that the situation of endangered species is not analogous to these other suggested uses. I argue that, as far as species preservation is concerned, triage starts with the wrong norms and values: it is "human chauvinistic," giving primacy to economic, political, and sociocultural aspects that emphasize human interests without recognizing the connection between the survival of other species and the survival of humans. Bennett is in the department of philosophy, Australian National University, Canberra, Australia. (EE)
Bennett, EL. "Is There a Link between Wild Meat and Food Security?," Conservation Biology 16(no.3, 2002):590-592. (v.13, #3)

Bennett, Jane and William Chaloupka, eds., In the Nature of Things: Language, Politics, and the Environment. Minneapolis: University of Minnesota Press, 1993. 224 pages. $17.95, paper. Informed by recent developments in literary criticism and social theory, the contributors address the presumption that nature exists independently of culture and, in particular, of language. The theoretical approaches of the contributors range across both modernist and postmodernist positions, including feminist theory, critical theory, Marxism, science-fiction, theology, and botany. The concept of nature is invoked and constituted in a wide range of cultural projects--from the Bible to science fiction movies, from hunting to green consumerism. How far is nature a social construct? (v4,#2)


Bennett, John W. Human Ecology as Human Behavior: Essays in Environmental and Development Anthropology, expanded edition. New Brunswick, NJ: Transaction Publishers, Rutgers, 1996. 396pp. $23.95 paper. John Bennett's collection of essays, dating back some thirty years, examine this topic from an anthropological perspective. He claims that this perspective needs to be a more influential force in future analytic environmental research.

Bennett, Larry E., Colorado Gray Wolf Recovery: A Biological Feasibility Study. Final Report - 31 March 1994. US Fish and Wildlife Service, Mountain-Prairie Region, Denver Federal Center, Denver CO. The study finds seven areas in western Colorado that meet the minimum recommended requirements for a sustainable population of about 1,000 wolves in total. This is about the same as the estimated population of wolves in the state in 1915. Bennett is with the University of Wyoming Fish and Wildlife Cooperative Research Unit, Laramie. A second part of this study, a sociological feasibility study, is to be released in December 1994, and done by the Human Dimensions in Wildlife Unit at Colorado State University. Wolves are being released in Wyoming in Yellowstone National Park this fall, see more below. (v5,#3)


Bennett, Steven J., Ecopreneuring: The Complete Guide to Small Business Opportunities from the Environmental Revolution. San Francisco: John Wiley and Sons, 1991. $ 34.95 cloth, $17.95 paper. 308 pages. (v2,#3)


Benson, John, "Aesthetic and Other Values in the Rural Landscape." *Environmental Values* 17(2008):221-238. The paper discusses some relationships between aesthetic and non-aesthetic reasons for valuing rural landscape, i.e., landscape shaped by predominantly non-aesthetic purposes. The first part is about the relationship between aesthetic reasons and considerations of utility and argues for an intimate connection between them. The next part considers the relationship between aesthetic and other non-instrumental reasons for valuing landscape and argues that there are important contingent but no essential connections between them. The third part considers the strength or weakness of aesthetic reasons for resisting landscape changes that would result from changes in land use.

Benson, Reed D. "A Watershed Issue: the Role of Streamflow Protection in Northwest River Basin Management." *Environmental Law* 26, no.1 (1996): 175. Benson examines how watershed protection efforts have become popular in the Northwest, as governments at all levels have found reasons to embrace them. He concludes that although these efforts promise a holistic approach to environmental problems, Western water law and politics may prevent them from addressing a key need of healthy watersheds: adequate instream flows. (v7, #3)
Bensted-Smith, Robert, "Repelling Invaders and Other Challenges for the Charles Darwin Foundation and the Galapagos National Park Service," Society for Conservation Biology Newsletter 9 (no. 4, 2002):1, 3. As of May 2002, after intensive efforts, including GPS technology, feral pigs have been finally and completely removed from Santiago, the largest island in the world from which pigs have been eradicated. The pigs have wreaked havoc on Santiago since the mid 1800's. Now the biggest challenge to conservation in the Galapagos is exotic insects and plants. There are over 600 introduced species of plants, and these outnumber native species. (v.13,#4)

Benton, L. M. "Selling the Natural or Selling Out? Exploring Environmental Merchandising." Environmental Ethics 17(1995):3-22. In the twenty years since the first Earth Day, the environmental movement has become increasingly "commercialized." I examine why many environmental organizations now offer an array of products through catalogs and magazines, or manage stores and outlets. In part one, I explore some of the economic and political influences during the 1970s and 1980s that resulted in increased organizational sophistication and an increased production of environmental products. The part two, I explore the "commercialization" of environmentalism from two angles. First, in terms of a deconstructionist critique of the system of commodities and image, I demonstrate that when environmental organizations partake in this consumer culture, they actually reproduce precisely the values and institutions that they criticize. Second, from a "constructionist" perspective, I argue that environmental products can re-enchant or reconnect people with nature, and thus can help change cultural attitudes about human-nature relationships. I conclude that environmental products are contradictory because environmental merchandise is juxtaposed uneasily between environmental ideological rhetoric and material ambition. Environmental organizations must recognize this ambiguity before they can deal with the problem effectively. Benton is in geography at Syracuse University. (EE)

Benton, Ted, ed. The Greening of Marxism. New York: Guilford Publications, Inc., 1996. 310 pp. $42.95 cloth, $17.95 paper. Tracing the history of the integration of ecological understanding with Marxist philosophy, this book explores the influence of green politics on Marxism, examines the new politics emerging from these movements, and shows how red-green alliances can transform the political landscape. (v7,#4)


to critique human rights discourse. Both humans and other species of animals are vulnerable to harm and require the same conditions for their well being, and the author develops a naturalistic, but anti-reductionist view of human nature. In a post-capitalist society, we need an ecological and socialist view of human rights. Benton is Reader in sociology at the University of Essex. (v5,#1) Reviewed by Eckersley, Robyn, "Natural Justice: From Abstract Rights to Contextualised Needs." Environmental Values 3(1994):161-172. (EV)

Benton, Ted., A Environmental Values and Human Purposes,@ Environmental Values 17(2008):201-220. Some writings by Alan Holland provide the starting point for an exploration of sources of environmental value in human social practices. It is argued that many practices both serve human purposes and also provide a setting for the emergence of environmental value. Such practices are ones in which activity is embedded in, and so both strongly constrained and enabled by, its conditions and media. Capitalist 'modernisation' has tended to erode these practices and associated values in favour of external purposes and instrumental values, especially in the farmed countryside. In the face of this, and partly on grounds of social justice, a revaluation of urban open spaces is advocated.


Benzoni, Francisco, "Rolston's Theological Ethic," Environmental Ethics 18(1996):339-352. The centerpiece of Holmes Rolston, III's environmental ethic is his objective value theory. It is ultimately grounded not in the Cartesian duality between subject and object, but in the divine. It is not his value theory, but rather his anthropology that is the weak link in an ethic in which he attempts to weave together the natural, human, and divine spheres. With a richer, more fully developed theological anthropology, Rolston could more deeply penetrate and critique those aspects of the present ways of being-in-the-world that are environmentally destructive. Benzoni is a doctoral student at the University of Chicago. (EE)

Benzoni, Francisco. "Creatures as Creative: Callicott and Whitehead on Creaturely Value." Environmental Ethics 28(2006):37-56. Alfred North Whitehead's metaphysics provides a means for overcoming the dualism embedded in J. Baird Callicott's "postmodern" axiology. Indeed, the lessons Callicott draws from the new physics and ecology imply Whitehead's position. While Callicott holds that subjectivity and valuing require consciousness, Whitehead argues that subjectivity and valuing characterize all metaphysically basic entities, conscious and non-conscious. Removing the constraint that valuing requires consciousness is a slight shift, but it makes all the difference. By jettisoning this constraint, we can develop a robust account of intrinsic value that overcomes Callicott's duality, while retaining his insights that valuing requires a valuer and fluent energy is more fundamental than discrete entities. (EE)


Berg, A., Tjernberg, M., "Common and Rare Swedish Vertebrates- Distribution and Habitat Preferences", Biodiversity and Conservation 5(No.1, 1996):101-. (v7,#1)

Berg, Scott and Cantrell, Rick, "Sustainable Forestry Initiative: Toward a Higher Standard" *Journal of Forestry*, 97(no. 11, Nov 01 1999):33-. The American Forest and Paper Association's Sustainable Forestry Initiative program offers building blocks to sustainable forestry in the United States and around the world. (v10,#4)


Berger, Anthony R. A Rapid Landscape Changes, Their Causes, and How They Affect Human History and Culture. @ *The Northern Review* Number 28 (Winter 2008): 15-26. Many landscape changes can readily be seen within a human lifetime, and rapid changes have often occurred: volcanic eruptions, coastal erosion, climate change, floods, fires, earthquakes. Paleo-environmental science has revealed prior rapid landscape changes, sometimes in the memories of indigenous peoples. How people reacted to such changes might influence the way we think today, providing perspectives helping to cope with environmental change in the coming years. Berger is in environment and development at Sir Wilfred Grenfell College, Memorial University of Newfoundland and Labrador. This paper is published in a special collection of proceedings from the conference A Rapid Landscape Change and Human Response in the Arctic and Subarctic, @ Whitehorse, Yukon (2005).

Berger, Antony R., *Dark Nature in Classic Chinese Thought*. Victoria, BC: Centre for Studies in Religion and Society, University of Victoria, 1999. 78 pages. ISBN 1-55058-205-4. Contact: CSRS, University of Victoria, Box 1700 Stn CSC, Victoria BC V8W 2Y2, Canada. E-mail: csrs@uvic.ca. How the founders of Daoism (Taoism) and Confucianism experienced and acknowledged natural catastrophes, river floods, channel switching, earthquakes, landslides, and sea-level rise. Many natural processes cause harm to humans and to ecosystems. Nature has two sides: nature supports life, but natural forces are not always benevolent to the well-being of either humans or ecosystems. This darker side of nature has been overlooked by environmental philosophers.

Some Chinese thinkers took the anthropocentric view that bad things in nature were the consequences of bad human actions. They saw the world as fundamentally harmonious, as long as people followed the correct rituals and codes of behavior (rather like some modern environmentalists). Other Chinese thinkers held that harm was part of nature's processes and is to be accepted as part of that pattern. On a human scale, these may cause pain and sorrow; on a cosmic scale, they are only the flow of the Dao (Tao). "There is a challenge, which in my view has not yet been fully met, to develop a way of living and thinking, naturalistic or not, that recognizes fully that nature has for all life forms both a benevolent and a harmful dimension" (p. 46). Berger is an earth scientist. (v.11,#1)

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Berger, J, "Is It Acceptable to Let a Species Go Extinct in a National Park?," Conservation Biology 17(no.5, 2003):1451-1454. (v.14, #4)


Berger, Joel and Carol Cunningham, "Active Intervention and Conservation: Africa's Pachyderm Problem," Science 263(1994):1241-1242. Few conservation programs have succeeded where the animal has valuable body parts that can be poached. The ban on elephant ivory may be working, though causing dissension in Africa, where countries with abundant elephants want to sell legal ivory, to support conservation. Africa's most endangered pachyderms are the rhinoceroses, in 25 years reduced from 65,000 to 2,500, a loss of 97%. Only one unfenced population of over more than 100 animals exists, in Namibia. Namibia, Zimbabwe, and Swaziland are using a
controversial dehorning, where the horn is sawed off and the animal returned to the wild. Does the dehorning deter poachers? Can hornless mothers defend calves from predators? Berger and Cunningham think that the answer may be no, on balance, in both cases, but both questions are hard to answer, partly because horned and dehorned animals mix; there is evidence on both sides.

Predators may not turn to rhinoceros calves until there is extended drought and other prey are in shorter supply. It might be better to move the rhinos to fenced areas. On the science and advocacy issue, Berger and Cunningham, a husband and wife team, had returned to Namibia when this article was published and a month later found that their research permits were not renewed by U. S. agencies and their money frozen by the Namibian government, apparently because their research yielded results that cast doubts on the wisdom of an established official policy. Their research has been supported by what looks like a Who's Who in government and NGO conservation agencies. See editorial by Peter F. Brussard in Society for Conservation Biology Newsletter, vol. 1, issue 2, May 1994.


Berger, Joel, Swenson, Jon E., and Persson, Inga-Lill, "Recolonizing Carnivores and Naive Prey: Conservation Lesson from Pleistocene Extinctions," Science 291(2001):1036-1039. Prey species, such as moose in Yellowstone, who have never encountered a predator such as a wolf, are at first naive, but they learn quite quickly to be wary of such new predators. Data from the Yellowstone wolf restoration. Within one season they are quite alert to the new dangers and within one generation, Wyoming moose with no previous experience of wolves for over a century are as alert as their Alaska cousins. Also Scandinavian data. This allays worries about prey species when carnivores are restored. Furthermore, such quick learning casts the "blitzkrieg hypothesis" about humans entering North America and rapidly killing naive prey species in doubt. Berger is in biology, University of Nevada, Reno. Swenson is in biology, Agricultural University of Norway. Persson is in zoology, University of Oslo.


Berger, Joseph, "Next Subway Stop, the Wilderness," New York Times, October 6, 2004, p. A27. New York City has 48 preserves of tidal marsh, shoreline, woodlands, creeks, kettle ponds with much wildlife, some of the reserves almost as pristine as when the Europeans first arrived. Some of them are even designated "forever wild." But they are less known to New Yorkers than they should be.

community has come in solving specific environment and development problems, what the main obstacles are to effective international solutions, and what needs to be done to overcome such barriers. (v7,#4)


Berghoefer, Uta, Ricardo Rozzi, and Kurt Jax. "Local versus Global Knowledge: Diverse Perspectives on Nature in the Cape Horn Biosphere Reserve." Environmental Ethics 30(2008):273-294. A case study of socio-ecological research conducted in Puerto Williams, Chile reveals that persons belonging to different sociocultural groups in Cape Horn have a diversity of perspectives and relationships with nature. For example, a strong sense of home and belonging was expressed by the indigenous Yahgan community and by old residents, mostly descendents of early twentieth-century colonizers. However, people identified with resource use did not include positive answers for a sense of home. The concept of common land presented marked contrasts among respondents. Those identified with a cultivating type of relationship favored private property over public land. For respondents identified with an embedded type of relationship, freedom of movement was one of their most essential values. Some respondents identified with resource use and those identified with intellectual and aesthetic relationships with nature also valued common land. The approach used in this study transforms polarized and dichotomous notions into gradients of perspectives related to different degrees of local and global ecological and cultural environments. The resulting hybrid vision of perspectives on nature may be helpful in times of global change, where both local and global scales contribute to identify specific problematic asymmetries as well as opportunities for communication among different sociocultural groups. (EE)

Berglund, Eeva. Knowing Nature, Knowing Science: An Ethnography of Local Environmental Activism. Cambridge, UK: The White Horse Press, 1997. Three different groups of civil activists protesting against infrastructure installations, and their understanding of science. The role of science is ambivalent. Post-Chernobyl Germany, cultures of protest, environmental conflict, and shifting boundaries of nature and culture. Berglund is in geography at the University of California, Berkeley. (v9,#2)


Bergman, B. J., "The Great Indoors," Sierra 83 (no. 2, March/April 1988): 82-83, 106-109. Wilderness experience in the mall. Yes, its' here. At the Ontario Megamall, 40 miles east of that other land of enchantment, Hollywood, you can (for an admission price of $9.95) "Step Inside the Great Outdoors," for the "American Wilderness Experience." "Go Wild in the Mall! Now Open," proclaims a billboard. There is a real sparrow hawk, and you can do a "half-million mile hike," though pregnant women and children are advised not to do too much. There is a "Wild Ride Theater," with simulator, like a roller coaster, with the wilderness passing by. There
is a Redwood Forest Ecosystem (simulated), then real bobcats sleeping under a make-believe pine tree. And more. (v9,#2)


Beringer, Almut. The Moral Ideas of Care and Respect: A Hermeneutic Inquiry into Adolescents' Environmental Ethics and Moral Functioning. Ph.D. dissertation in Natural Resources at the University of Michigan, 1992. William B. Stapp and Martin J. Packer were principal advisors. An interpretive-hermeneutic study of what it means to be moral toward nature. Discontent with contemporary environmental philosophy, leads Beringer to an inductive approach, based on real-life moral experiences. Environmental ethics needs to be rooted in the psychology of people to be applicable. Do people have the psychological capacities to put into practice what philosophers recommend? In an empirical study, 31 high school juniors comment on the ethical dimensions of environmental issues, and their responses are analyzed to answer the question. (v6,#3)

Berkeley, Bill, "Race, Tribe, and Power in the Heart of Africa," World Policy Journal 18 (no. 1, Spring, 2001):79-97. "This is an essay about evil. Its setting is Africa." "The bad guys in Africa are black and white, and shades in between. These stories are a measure of how much Africans have in common with the rest of mankind, not how much the differ. ... Today there is genuine cultural diversity in the gallery of twentieth century demonology, the late arrival of black fascism providing the ultimate testimony that political sin, as with all other kinds of sin and virtue, knows no color." And even more discouraging for wildlife conservation in Africa. Abridged from a forthcoming book: The Graves Are Not Yet Full: Race, Tribe and Power in the Heart of Africa

Berkes, F, "Rethinking Community-Based Conservation," Conservation Biology 18(no.3, 2004):621-630. (v. 15, # 3)

Berkes, Fikret, "Religious Traditions and Biodiversity," Encyclopedia of Biodiversity 5: 109-120. Religious traditions have little to say specifically about biodiversity, but they provide the values, worldviews, or environmental ethics that shape the way in which different societies interact with biological diversity and nature in general. In this sense, religion can be part of the problem or part of the solution. Anthropologist Eugene Anderson observes that all traditional societies that have succeeded in keeping resources productive over time have done so in part through religious or ritual representation of resource management. The key point, he says, is not religion per se, but using emotionally powerful cultural symbols to maintain a sense of sacred respect. (v.11,#4)


Berleant, Arnold, and Carlson, Allen, eds., special issue, *Environmental Aesthetics*, of *The Journal of Aesthetics and Art Criticism* 56, no. 2, Spring 1998. Stimulating discussions in a steadily developing field of aesthetics. Frequent themes are experience of nature as more engaged than is usual in the arts, its multi-sensory nature, the character of disinterestedness, environmental aesthetics and environmental ethics, the place of the scenic in a more comprehensive aesthetic, and the role of science in aesthetic appreciation of nature. Contains:

--Saito, Yuriko, "The Aesthetics of Unscenic Nature"
--Godlovitch, Stan, "Evaluating Nature Aesthetically"
--Foster, Cheryl, "The Narrative and the Ambient in Environmental Aesthetics"
--Brady, Emily, "Imagination and the Aesthetic Appreciation of Nature"
--Eaton, Marcia Muelder, "Fact and Fiction in the Aesthetic Experience of Nature"
--Rolston, III, Holmes, "Aesthetic Experience in Forests"
--Fisher, John Andrew, "What the Hills Are Alive With: In Defense of the Sounds of Nature"
--Schauman, Sally, "The Garden and the Red Barn: The Pervasive Pastoral and Its Environmental Consequences"
--Melchionne, Kevin, "Living in Glass Houses: Domesticity, Interior Decoration, and Environmental Aesthetics"
--Sandrisser, Barbara, "Cultivating Commonplaces: Sophisticated Vernacularism in Japan."


- Lehari, Kaia, Chapter 6. "Embodied Metaphors," pages 75-87. "A person's physical involvement in nature is the deepest layer of the environmental condition and the source of its meanings."
Berleant, Arnold. *Aesthetics and Environment: Variations on a Theme*. Aldershot: Ashgate, 2005. Papers and talks given by Berleant over the past 25 years. Berleant's presents a participatory model: AIn this view, the environment is understood as a field of forces continuous with the organism, a field in which there is reciprocal action of organism on environment and environment on organism, and in which there is no sharp demarcation between them (p. 9).


Bermond, Bob, "Consciousness or the Art of Foul Play," *Journal of Agricultural and Environmental Ethics* 10(1997/1998):227-247. ABSTRACT. The psychological literature about consciousness has been analyzed. It is argued that:
1) Only the higher symbolic cognitive powers like the ability to keep secrets, knowledge of self or self-consciousness, a long-term view on the future, the ability to determine long-term goals, and to freely plan future behavior, add positive fitness-value to consciousness. Without these higher intellectual abilities consciousness will have only negative fitness value and no positive one. The intellectual powers mentioned may therefore be considered as prerequisites for consciousness. Consciousness may therefore only be expected in those animal species that show these capacities in their behavior. So far these capacities have only been described for the anthropoid apes and humans. For the time being, they are therefore the only species in which consciousness may be expected.
2) Consciousness is not synchronous with real time. Human consciousness is, in as well in the perception of stimuli as in the experience of free will to act, most times running after the facts.
3) Consciousness has to be viewed as an instinct that has been developed late in evolution. It is partially based upon primarily innate neural circuits, fulfilling specialized cognitive functions by which information is interpreted and inferences are made, in a more or less automatic way.
4) Most information processing concerning daily decisions, is done by parallel nonconsciously functioning neural modules using 'sloppy logic', and only the end-product of these modules can be pushed forwards to consciousness. For this reason consciousness will, most times, lack the necessary information to come to the correct inferences about the evaluations on which the decision is based. Therefore, only rarely will people have insight into their cognitive processes or the real sources of their behavior. When asked why they behaved as they did, they will produce confabulations. However, people's erroneous reports are not capricious, but regular and systematic in such a way that they will fit the pre-existing ideas and beliefs. The contents of these reports are therefore not based upon introspection, but, most times, on (sub)culturally accepted ideas.

KEY WORDS: Consciousness, fitness-value and foul play. (JAEE)

Bernauer, Thomas. "The International Financing of Environmental Protection: Lessons from Efforts to Protect the River Rhine against Chloride Pollution," *Environmental Politics* 4(no.3, Fall 1995):369-. (v6,#4)

Bernhardt, E.S. et al (15 others), "Synthesizing U.S. River Restoration Efforts," *Science* 308(29 April 2005):636-637. There is increasing evidence that the degradation of waters is at all time high (despite the Clean Water Acts). More than one-third of the rivers in the United States are impaired or polluted, and freshwater withdrawals in some regions are so extreme that some major rivers no longer flow to the sea year round. Extinction rates for water fauna are five times that for terrestrial fauna. But stream and river recovery can work, though it tends to be fragmented and disorganized. It can also be a highly profitable business. The lead author is in natural resources and environment, University of Maryland.


Bernson, Vibeke, *The Framework Convention on Climate Change: Analyzing the Role of Epistemic Communities and of Problem Uncertainty in the Outcome of the Negotiations*. Lund, Sweden: Lunds Universitet, Statsvetenkapliga Institutionen. A master's degree in International Corporation and Administration on Negotiation. In English. 57 pages. Contact Kemikalieinspektionen, Box 1384, 171 27 Solna, Sweden. Phone 08/730 57 00. The Framework Convention on Climate Change, at the Earth Summit at Rio in 1992, is ineffectual. This results from the negotiation process by which it was prepared, and this is analyzed, using regime theory and the roles of the epistemic communities involved, such as natural scientists, their scientific organizations, economists, and national governments, all of which can have different belief systems and behave differently in the face of uncertainties. (v7,#2)


Bernstein, Steven, *The Compromise of Liberal Environmentalism*. New York: Columbia University Press, 2001. "Liberal environmentalism" predicates environmental protection on the promotion and maintenance of a liberal economic order, legitimated at the UNCED Rio Summit. Accepting this position, revising classical accounts over the last three decades, has significant implications for our ability to address global environmental problems. (v.13,#4)

Berreby, David, "Twists and Turns in Chimp AIDS Research," and "Unneeded Lab Chimpanzees Face Hazy Future," *New York Times*, February 4, 1997, p. A1, C8. Surplus chimps. US biomedical researchers hold about 1,800 chimpanzees that are largely not needed in research, about 200 of them infected with H.I.V. It was once thought that the infected chimps would soon die and could serve as models for human research, but this proved largely wrong, although, many years later, a few chimps do seem to be catching the disease. Others were used by the Air Force four decades ago to establish that humans could live in space. The chimps can live 50-60 years. Costs and care of the chimps is increasingly an issue, and younger researchers less and less comfortable with using them in research, for ethical reasons. Frederick Coulston and his Coulston Foundation control 650 of the animals and seek to do continued research, amid growing controversy. (v8,#3)


Berry, Gregory R., "Organizing Against Multinational Corporate Power in Cancer Alley: The Activist Community as Primary Stakeholder", *Organization and Environment*, 16, (No. 1, 2003): 3-33. An examination of how a small, oppressed and seemingly powerless community in Louisiana persevered to defeat the strategic plans of a multinational chemical company that was supported by local and state government elites. The evolving construct of environmental justice played a significant part of this battle as community groups formed coalitions with local, state, and national agents and organizations to challenge the decision to site a hazardous facility. Lawsuits resulted in costs, lengthy delays, and uncertainty for the corporation, leading Shintech to abandon its original site of choice. Implications of the study are discussed for stakeholder theory, environmental justice scholars and community advocacy groups. Gregory is based at Texas Wesleyan University where he works on organizational theory, specialising in the social, political and economic interactions of firms and communities.

argue for an approach that has been used at Yale School of Forestry and Environmental Studies with much success. What characteristics and contexts of leadership are unique to the conservation field? (v4,#2)

Berry, Kate A, "Water Along the Border; An Introduction to 'Water Issues in the U.S.-Mexico Borderlands'," Natural Resources Journal 40(no.4, Fall 2000):755-. (v.12,#4)


Berry, R. J., "Environmental Ethics--From Eden to Rio--and Back Again?" Faith and Thought, April 1998, No. 23. Faith and Thought is published by The Victoria Institute, Croydon, Surrey, UK. ISSN 0955-2790. A prominent British ecologist, geneticist, and conservative Christian reflects on the Biblical concept of nature and humans in nature (Eden), contemporary movements in environmental conservation, surrounding and resulting from Rio, and wonders whether we are not returning to a concept of humans as trustees of creation (aka managers in secular circles). Christians should be making up their minds about environmental issues and sharing them with others, taking the lead and witnessing to the glories in God's creation. Photographs of Earth seen from space have become icons, awakening people to the environment and its fragility. We are living in a finite, not infinite, world and this is all we have. (v.9,#3)

Berry, R. J. "Sam", "Is a Global Environmental Ethic Attainable?" Science and Spirit 7 (no. 4, Winter 1996):6-7. Berry, a geneticist at University College, London, served on a committee to write a Code of Environmental Practice for the Economic Summit of Nations, a secular group, as well as on a Church of England group to prepare a statement of environmental stewardship. He found that the principles of both groups were almost the same. He also serves with an IUCN group, the Ethics Working Group, and finds their principles similar. This leads him to think that a world ethic for sustainable living may be possible. (v7,#4)


"The underlying theme of everything in this book is the relation of God to his creation. In examining this relationship, I have had to assume the existence of God. If he does not exist, this obviously rules out any interaction and condemns my enterprise; natural theology (and the theology of nature) will be no more than a misleading vapour.

My approach has been to explore the credibility and anticipated results (or the coherence) of the relationship in as rigorous a way as possible, and thence face the decision whether this leaves us with any firm results on which to ground a natural theology, never mind an understanding of God himself. In adopting this approach, I am following the methodology of natural science rather than theology. I am setting out to test a hypothesis" (p. 234)

"Stewardship is a rational conclusion from a study of the natural world and its misuse; when awe is added to stewardship it provides a motive for action as well as an occasion for
enjoyment. Awe can be regarded as an empowerment of stewardship. ... If we couple awe to stewardship, we have a powerful engine for creation care."

Berry is professor of genetics (emeritus) at University College, London, and a past president of the British Ecological Society.

Berry, R. J., "Sam", "Creation and the Environment," Science and Christian Belief 7 (1995): 21-43. Debates about creation and evolution have distracted attention from the proper understanding of the environment as God's creation, for which we are responsible to God. This has left the way open for a plethora of odd religious ideas, which in turn have raised suspicions about orthodox Christian interpretations of the environment and distracted from the obligations of stewardship laid by God on his people. This essay reviews some of the deficiencies and divergences of creation doctrine, beginning from the implicit teaching of scripture that God created the world ex nihilo, that nature is not divine, and that it has been redeemed by Christ's work. The consequence of living in God's image in God's world is that we are stewards, accountable to God for our creation-care. The working-out of this doctrine is explored in terms of the more important distortions of our relationship to the world (syncretism, New Age teachings, Gaia, creation spirituality, deep ecology) and the weakness of our current perceptions. The conclusion is that traditional teachings about responsible stewardship need to be asserted and emphasized by Christians, and that these form the basis of environmental care for Christian and non-believer alike. Berry is professor of genetics at University College London, formerly president of the British Ecological Society, of the Linnean Society, and the European Ecological Federation. (v6,#2)


Berry, R. J. (Sam), ed., Environmental Dilemmas: Ethics and Decisions (London: Chapman and Hall, 1993), 271 pages. Hardcover, , 29.95. Case studies in environmental ethics. Andrew Brennan (Philosophy, University of Western Australia) has the opening article, "Environmental Decision-Making." See next paragraph. Frank Golley (Ecology, University of Georgia) has an article, "Environmental Attitudes in North America." Wolfgang Haber: "Environmental Attitudes in Germany." Case studies by other authors, all British: air quality ("History and Ethics of Clean Air"), nuclear power, agriculture, farm animals, wetland conservation, Scottish nature conservation, economics of pollution control, industry and government policy formation. With an emphasis on the practical factors that had to be weighed in when decisions were made in these areas. Sam Berry is professor of genetics at University College, London, past President of the Linnean Society and the British Ecological Society and currently president of the European Ecological Federation. (v4,#1)


converges with and provides an undergirding to secular thinking as expressed by the Brundtland Commission on sustainable development and the Economic Summit Nations on environmental ethics. But Christianity goes further in urging an awe for creation. Christians have a positive contribution to make and ought to be bolder in their witness. Berry is professor of genetics at University College, London, president of the European Ecological Federation, and past-president of the British Ecological Society and the Linnean Society. (v4,#2)


Berry, Thomas and Thomas Clarke, edited by Anne Lonergan and Stephen Dunn, Befriending the Earth: A Theology of Reconciliation between Humans and the Earth. 158 pages, paper $ 7.95. Two Catholic priests discuss the role of religion in the ecological movement. Religion has failed to address the despoiling of Earth, which is the greatest crisis in the history of the planet. Mystic, CT: Twenty-Third Publications, 1991. (v2,#4)


Berry, Wendell, What are People For? San Francisco: North Point Press, 1990. With a concluding essay on "Nature as Measure" (of the success of agriculture. Other essays: "A Few Words in Favor of Edward Abbey" and "God and Country" (Christianity and ecology). (v1,#4)

Berry, Wendell, Sex, Economy, Freedom and Community. New York: Pantheon (Random House), 1993. $ 20.00. With essays on conservation and local economy, how conservation is good work, contrasted with most agriculture today, which is bad work, and a rousing treatment of how ecologists have misused the Bible. Berry is a poet, essayist, novelist, farmer, with an appointment at the University of Kentucky. (v4,#4)

Berry, Wendell, Fidelity: Five Stories. Pantheon. 200 pages. $ 20. Stories about the way the beloved community brings people through tragedy into celebration and joy, and stories about the way wilderness becomes a place of renewal and rebirth in which we rediscover humanity. (v4,#1)

Berry, Wendell. "The Death of the Rural Community." The Ecologist 29(no. 3, May 1999):183-
.


Berry, Wendell. Another Turn of the Crank. Washington, DC: Counterpoint, 1995.  $ 18.00
109 pages. The title reflects Berry's feelings about how long he has been arguing his case
against expansionist capitalism's social and environmental effects, now some 30 years, and how
idiosyncratic his case appears to some. Essays on economics, medicine, the meaning of family,
agriculture, forestry, education, and the state of American democracy. Small communities and
the places they occupy are threatened by the construction of a global economy. Because such an
economy makes it possible for the products of any region to be undersold by the product of
another region, it makes the moderate, stewardly use of arable land unlikely. Private people, farm
families, cannot afford to work this way. As a result, growing food, managing fuel and
manufacturing all will be done by large corporations. And these, Berry says, are not interested in
the good health--economic or natural or human--of any place on earth. Berry teaches English at
the University of Kentucky and is also a farmer there. (v7, #3)

(v.11,#1)

Bertholdbond (Berthold-Bond), Daniel. "The Ethics of 'Place': Reflections on Bioregionalism."
Environmental Ethics 22(2000):5-24. The idea of "place" has become a topic of growing interest
in environmental ethics literature. I explore a variety of issues surrounding the conceptualization
of "place" in bioregional theory. I show that there is a necessary vagueness in bioregional
definitions of region or place because these concepts elude any purely objective, geographically
literal categorization. I argue that this elusiveness is in fact a great merit because it calls attention
to a more essential "subjective" and experiential geography of place. I use a reading of Aldo
Leopold's Sand County Almanac as an example of the value of a non-literalistic geography for
the understanding of place. (EE)

Bertollo, P, "Landscape Evolution and Health in Northeastern Italy: A Multi-Dimensional

Besley, J. and Shanahan, J., "Skepticism About Media Effects Concerning the Environment:
Examining Lomborg's Hypotheses," Society and Natural Resources 17(no. 10, 2004): 861-
880(20). (v.14, #4)

Besley, John; Shanahan, James, "Skepticism About Media Effects Concerning the Environment:
Examining Lomborg's Hypotheses", Society and Natural Resources 17(no.10, Nov-Dec


Best, Kirsty, "Interfacing the Environment: Networked Screens and the Ethics of Visual Consumption," *Ethics and the Environment* 9(no. 2, 2004):65-85. The screen continues to be the primary generator of visual imagery in contemporary culture, including of the natural world. This paper examines the screen as visual interface in the construction and consumption of physical environments. Screens are increasingly incorporated in our daily habits and imbricated into our lives, especially as mediating technologies are embedded into the surfaces of our physical surroundings, shaping and molding our interactions with and perceptions of those environments. As screens become increasingly portable and digitized, they further modify our relationships with environments, projecting multiple images and imagery which fracture and layer visual consumption. And as screens become ubiquitous in urban environments, they network into maps of information control and consumption. We need to fully understand these processes of screen-mediated representation and interaction in order to be able to comment on the ethics of contemporary practices of visually consuming physical environments. Best is in communications, University of Ottawa, Canada. (E&E)


Betty, L. Stafford, "Making Sense of Animal Pain: An Environmental Theodicy," *Faith and Philosophy* 9 (no. 1, January, 1992):65-82. No present theodicy, including John Hick's, makes adequate sense of animal pain. Hick fails when he enlists animal pain exclusively in the service of human soul growth. Frederick Ferré correctly points out that this solution is too anthropocentric. A more adequate theodicy avoids this mistake by showing that pain, from amoebas to humans, is crucial not only to the betterment of souls but to their very origination, a process beginning long before humans evolved on the planet. Creation is the process by which God is multiplying God's own experience, and this process necessarily requires eons of time, necessarily starts with the lowest forms of life, and necessarily entails pain and suffering. The resulting
good justifies all the howls and lamentation of the planet from its inception. Betty is at California State University, Bakersfield. (v3,#2)

_Between the Species_. PO Box 254, Berkeley, California 94701. The leading journal focusing on the ethical issues in the human treatment of animals. It regularly publishes the papers of the Society for the Study of Ethics and Animals. Articles frequently deal with the relationship between animal liberation and environmental ethics, as well as the status of animals in environmental policy. (Katz, Bibl # 2)


Beuter, John H; Alig, Ralph J, "Forestland Values", _Journal of Forestry_ 102 (no.8, December 2004):4-8(5).


_Beyond 40 Percent: Record-Setting Recycling and Composting Programs_ (Corvelo, CA: Island Press, 1991). 270 pages. $ 39.95 cloth, $ 25.00 paper. (v2,#2)

_Beyond the Mythic West_, prepared by the Western Governor's Association. Salt Lake City, UT: Gibbs Smith, 1990. $ 29.95. Pictures by some of the best photographers in the U. S. West today and essays by Stewart Udall, former Arizona Congressman, Charles Wilkinson, University of Colorado Law School, William Kittredge, a rancher turned writer and English professor, and others. (v1,#4)


Women's health and the environment. Environmental racism and health. Healing ourselves and the Earth. Bhagat is in the Church of the Brethren, active in National Council eco-justice concerns, with wide experience in the UN and overseas. (v.10,#1)

Bhattacharjee, Yudhijit. AA Sluggish Response to Humanity's Biggest Mass Poisoning. @ Science Vol. 315, no. 5819 (23 March 2007): 1659-61. In India, in the region of Chandalathi, a series of wells were drilled to provide water, since the surface water had become increasingly polluted and in short supply. However, the well water proved to have high levels of naturally occurring arsenic, and more than 40 million people live in areas where such drilled wells have elevated levels of arsenic. In neighboring Bangladesh, over 82 million people are potentially affected. Drinking well water results in disease and death. The Indian government=s response has been slow and uncertain. Filters are an option, but filters are not well maintained. Drilling deeper wells produces clean water, but is expensive. Cleaning up the surface water is another option, and also is expensive. When such arsenic-laden aquifer water reaches the surface in springs and is exposed to air for a few days, the metal binds to iron oxides and other compounds and precipitates out of the water, but this does not happen in an enclosed tube well.

Biao, Xie, Xiaorong, Wang, Zhuhong, Ding, and Yaping, Yang, "Critical impact assessment of organic agriculture," Journal of Agricultural and Environmental Ethics 16(2003):297-311. Organic agriculture has set for itself the goals of minimizing all forms of pollution and maintaining sustainability of the farming system. By striving for these goals, organic farming meets the demands of an increasing number of consumers who are critical of conventional production methods. This paper gives an overview of the present state of the art in the different issues. Organic farming is suited to improve soil fertility and nutrient management markedly on the farm level; regarding biodiversity, comparison studies show that organic farming has more positive effects on biodiversity conservation. KEY WORDS: biodiversity, environmentally friendly production, nutrient management, organic agriculture, product quality, soil fertility. (JAEE)


Biber Kiemm, S., and T. Cottier, eds., Rights to Plant Genetic Resources and Traditional Knowledge: Basic Issues and Perspectives. Oxford: Oxford University Press, 2006. The means, instruments and institutions to create incentives to promote conservation and sustainable use of traditional knowledge and plant genetic resources for food and agriculture, in the framework of the world trade order. The option to create specific sui generis intellectual property rights of the TRIPS agreement, ways to support the maintenance of information that cannot be allocated to specific authors. Biber-Kiemm is at the University of Basel. Cottier is with the World Trade Institute, Switzerland.

Biehl, Janet and Staudenmaier, Peter, Ecofascism: Lessons from the German Experience. San Francisco: AK Press, 1995. 73 pages. $ 7.00 paper. There are two essays: Staudenmaier, Fascist Ideology: The `Green Wing' of the Nazi Party and its Historical Antecedents"; Biehl, "Ecology and the Modernization of Fascism in the German Ultra-Right." The authors, as social ecologists in the tradition of Murray Bookchin, find ecological crises to be rooted in social
injustice and oppression, rather than in anthropocentric attitudes as such. Ecological holisms emphasizing the oneness of human beings with nature have been and are being combined with reactionary "blood and soil" fascism, racism, xenophobia, and anti-immigrationism. We should appreciate how ecology can be misused, and to prevent such misuse we should understand ecological crises in political contexts, rather than trying to understand society as determined by scientific ecology. (v7,#4)


Biel, Alice Wondrak, "The Bearer Has Permission: A Brief History of Research Permitting in Yellowstone National Park", Yellowstone Science 12 (no. 3, Summer 2004):5-20. With a discussion of bio-prospecting in the Park. After the use of a microbe from the hot springs, Thermus aquaticus, in developing the Polymerase Chain Reaction (PCR) process, instrumental in DNA sequencing, and worth millions of dollars and a Nobel Prize, the Park has been considering requiring benefit-sharing agreements. These are authorized by the National Parks Omnibus Management of 1998, and are on the horizon, though few such agreements have as yet been put in place. (v. 15, # 3)

Biel, Anders, and Garling, Tommy. "The Role of Uncertainty in Resource Dilemmas," Journal of Environmental Psychology, vol. 15, no. 3 (September 1995): 221-33. Resource dilemmas entail a conflict between self-interests and the welfare of a group or society at large. Individuals with a pro-social orientation may act in the interest of the collective, but there are complications due to uncertainty. As the consequences are perceived to be uncertain, increasing uncertainty will be cooperation less consistent. Biel and Garling are in psychology, Göteborg University, Göteborg, Sweden. (v7, #3)


Bierlein, Lawrence W. "Transportation Regulations Applicable to Environmentally Hazardous Substances." Journal of Environmental Law & Practice 3(May 1996):30. The U.S. Department of Transportation's program to ensure safety in the transportation of hazardous substances is summarized and analyzed. (v7,#2)


Biermann, Frank, "The Case for a World Environment Organization," Environment 42(no. 9, Nov. 1, 2000):22- . Some people argue that a centralized international organization is essential to improve the creation and implementation of more effective environmental policies. Will this type of system end the fragmentation among various existing agencies and treaties that deal with the environment? (v.12,#2)
Biggs, H. C., and Potgieter, A.L.F., "Overview of the Fire Management Policy of the Kruger National Park," *Koedoe: Research Journal, South African Parks* 42/1, 1999, pages 101-110. Fire management in Kruger has been controversial. Alternative proposed are: a lightning-driven system (the present policy), patch mosaic burning, and range condition burning. Tests of the latter two in parts of the Park will be tested for 20 years, and results evaluated. A recurrent problem is that decisions have to be made with insufficient evidence. Biggs and Potgieter are ecologists at Kruger. (v.10,#3)


Bilimoria, Purusottama, *Environmental Ethics* (Geelong, Victoria, Australia: Deakin University, 1992). 219 pages. The introductory essay is "The Moral Enfranchisement of Nature: A Short Introduction to Environmental Ethics," the first thirty pages of the book. There is also included a study by Jock McCulloch on "Hiroshima and the Problem of Nuclear War: A Case Study." The latter part of the book is reprinted readings from Arne Naess, Paul Taylor, Hans Jonas, and Robert Elliot, also documentary readings relevant to Hiroshima and nuclear winter. This book was produced as class materials for use at Deakin University in a class entitled "Ethics and Society," but is appropriate for wider use. Contact Purusottama Bilimoria, Faculty of Humanities, Deakin University, Geelong, Victoria 3217, Australia. (v3,#4)

Binder, Renee and Burnett, G. W., "Ngugi Wa Thiong'o and the Search for a Populist Landscape Aesthetic." *Environmental Values* 3(1994):47-59. This essay examines how Ngugi wa Thiong'o, east Africa's most prominent writer, treats the landscape as a fundamental social phenomenon in two of his most important novels, *A Grain of Wheat* and *Petals of Blood*. Basing his ideas in an ecological theory of landscape aesthetics resembling one recently developed in America, Ngugi understands that ability to control and manipulate a landscape defines a society. Nostalgia for the landscape lost to colonialism and to the corrupting and alienating influences of international capitalism needs to be replaced by its progressive evaluation as it is reshaped by collective action for a new future. Alienation from, and loss of responsibility for, the land may be a major factor contributing to Africa's environmental problems. Ngugi's position casts doubt on professional land management's ultimate ability to influence the shape of the landscape in the face of the collective social will. KEYWORDS: Ngugi wa Thiong'o, landscape aesthetics, development, Kenya. Binder is at Sumter National Forest, S.C. Burnett is with the Dept. of Parks, Recreation and Tourism Management, Clemson University, S.C. (EV)


introduction of genetically modified organisms (GMOs) in Europe has been characterized by controversy. In 2002, the European Union introduced the concept of coexistence as a compromise solution that, through the establishment of science-based technical measures, should allow the market to operate freely while reducing policy conflicts on GMOs. However, the concept remains highly contested and the technical measures difficult to apply. This paper presents qualitative research on the conceptualization and implementation of the coexistence framework in two regions of Spain (Catalonia and Aragon), where 42% and 55% of maize was GM in 2006, respectively. In this context, the concept of coexistence and its proposed implementation both fail to resolve previous conflicts and actually work to generate new ones through the individualization of choice and impacts. Considerations of the social conditions in which the technology and the management measures are implemented were not taken into account. This resulted in the promotion of biotechnological agriculture over other alternatives.

Binimelis is at the Institute of Environmental Science and Technology (ICTA), Autonomous University of Barcelona, Spain.


Binswanger, Hans Christoph, "The Challenge of Faust," Science 281(31 July 1998):640-641. "Human progress entails curbing nature ... [this may have] unforeseen consequences because nature reacts according to its own laws, which humans can never entirely predict. ... Perhaps Faust, or modern man, may never ... achieve a moment so lovely that he would want to hold on to it forever. But if we strive to develop a more respectful relationship with nature, we may very well come closer to creating just such a moment." Binswanger is emeritus in economics, University of St. Gallen, Switzerland. (v.9,#3)

Biodiversity and Conservation, Volume 9, No. 8, August 2000, is a special issue: "Concepts of Nature: The Social Context and Ethical Implications of Ecology." The guest editors are Nigel S. Cooper and Michael J. Samways. Entries are listed separately. (v.11,#4).
Biodiversity and Conservation, volume 9 no. 8, August 2000 is a special issue: "Concepts of Nature: The Social Context and Ethical Implications of Ecology." Entries listed separately. (v.13,#1)


Biological Conservation 112 (nos. 1-2), 2003, is a special issue on the Cape Floristic Province, South Africa, and conservation issues and management plans there.


BioScience, November 1989, vol. 39, no. 10. The whole issue is devoted to the fire impact on Yellowstone. Authors of the seven lead articles and editorials include some two dozen persons intimately involved in the fires. Articles deal with the fires and fire policy, the historical background, issues raised by the fires in landscape ecology, with fires and stream ecosystems, with fires, drought and large mammals, and with interpreting the fires to the public. (v1,#2)

BioScience, November 1995, vol. 45, no. 10, is a theme issue on systematics and the biodiversity crisis, the role of systematic biology in identifying, classifying, and conserving biological diversity. (v7,#1)


Birch, Charles. Science and Soul. West Conshohocken, PA: Templeton Foundation Press, 2008. Birch, a famous Australian ecologist, reminiscences about persons influential in his careermany famous ecologists, evolutionary biologists, and philosophers of religionand develops his philosophy of life that he calls process pansubjectivism, panentheism. AProcess thought does not see any line in the sand where mentality begins. Hence, there is no zero-mentality at any level of the evolutionary sequence of actual entities@ (p. 165). In the course of this he addresses environmental ethics and values in nature.

Birch, Thomas H. "Moral Considerability and Universal Consideration." Environmental Ethics 15(1993):313-32. One of the central, abiding, and unresolved questions in environmental ethics has focused on the criterion for moral considerability or practical respect. In this essay, I call that question itself into question and argue that the search for this criterion should be abandoned because (1) it presupposes the ethical legitimacy of the Western project of planetary domination, (2) the philosophical methods that are and should be used to address the question properly involve giving consideration in a root sense to everything, (3) the history of the question suggests that it must be kept open, and (4) our deontic experience, the original source of ethical obligations, requires approaching all others, of all sorts, with a mindfulness that is clean of any a priori criterion of respect and positive value. The good work that has been done on the question should be reconceived as having established rules for the normal, daily consideration of various kinds of others. Giving consideration in the root sense should be separated from giving high regard or positive value to what is considered. The overall, in this essay I argue that universal consideration--giving attention to others of all sorts, with the goal of ascertaining what, if any, direct ethical obligations arise from relating with them--should be adopted as one of the central constitutive principles of practical reasonableness. Birch is in the Department of philosophy, University of Montana, Missoula, MT. (EE)

Birch, Thomas H. "The Incarceration of Wildness: Wilderness Areas as Prisons." Environmental Ethics 12(1990):3-26. Even with the very best intentions, Western culture's approach to wilderness and wildness, the otherness of nature, tends to be one of imperialistic domination and appropriation. Nevertheless, in spite of Western culture's attempt to gain total control over nature by imprisoning wildness in wilderness areas, which are meant to be merely controlled
"simulations" of wildness, a real wildness, a real otherness, can still be found in wilderness reserves. This wildness can serve as the literal ground for the subversion of the imperium, and consequently as the basis for the practical establishment of and residence in what Wendell Berry has called the "landscape of harmony." Here all land becomes wild sacred space that humans consciously come to reinhabit. In this subversive potential lies the most fundamental justification for the legal establishment of wilderness reserves. Birch is in the Department of philosophy, University of Montana, Missoula, MT. (EE)


Birch, Thomas H., "The Incarceration of Wildness: Wilderness Areas as Prisons," Environmental Ethics 12(1990):3-26. This important paper may signal a new research direction in environmental ethics. Birch presents a literary/philosophical/political analysis of the other, of "wildness," and of the social deception in Western culture about wilderness and environmentalism. The creation of wilderness preserves is a continuation of domination, unless it is understood as the maintenance of the experience of wild otherness. Wherever the wild occurs, it is a pocket of resistance to the imperial domination of anthropocentric Western culture. Because this paper represents a revolt against analytic argumentation as the method of environmental ethics, it tends to be vague; e.g., the practical conclusion---preserve wilderness anyway---seems to contradict the theme. But this is a provocative speculation into the nature of wilderness and environmental policy. (Katz, Bibl # 2)


Bird, Elizabeth Ann R., "The Social Construction of Nature: Theoretical Approaches to the History of Environmental Problems." Environmental Review 11 (1987): 255-264. Important and provocative argument concerning the social construction of ecological laws which describe nature. Ecology does not provide us with an accurate representation of nature, but rather a socially constructed experience based on negotiations among the scientific community. This view has enormous implications for environmental ethics: it questions the idea that a "natural world" can be preserved. (Katz, Bibl # 2)


Birdsall, Nancy, Kelley, Allen C., and Sinding, Steven W., eds., Population Matters: Demographic Change, Economic Growth, and Poverty in the Developing World. New York: Oxford University Press, 2001. Rapid population growth hinders economic development (the Malthusian claim), contrary to the recently rather more popular claim that increasing numbers with increasing technology increases the productivity base. Rapid population growth is generally adverse to economic development. But a number of nations have managed to escape
the demography-poverty trap. The anthology contains relatively little on linkages between population and environmental degradation, and little on the politics of family planning, particularly assistance from the United States, which is lately under siege. Reviewed by Jeffrey D. Sachs, "Rapid Population Growth Saps Development," Science 297(19 July 2002):341.


Birkeland, Charles, "Ratcheting Down the Coral Reefs", BioScience 54(no.11, November 2004):1021-1027(7). Coral reefs are continuing to deteriorate around the world, despite millions of dollars worth of government effort per year, the commitment of more than 450 nongovernmental organizations, and a long list of successful accomplishments. Researchers and managers must become more aware of positive feedback, including the self-reinforcing ecological, technological, economic, cultural and conceptual processes that accelerate the degradation of coral reefs. Much of the research on coral reef damage has focused on its proximal causes (e. g., global warming, increased atmospheric carbon dioxide, overfishing, pollution, sedimentation, and disease) rather than its ultimate causes, the increasing human population and associated economic demands. To stop the deterioration of coral reef ecosystems, management must be proactive, terminating the self-reinforcing processes of coral reef degradation rather than perpetually restoring reefs or resource stocks. This can be accomplished only by clarifying the entire economic picture to instill more responsible behavior in the public.


Birkeland, Janis. "The Relevance of Ecofeminism to the Environmental Professions." The Environmental Professional 17 (no. 1, 1995): 55- . (v6,#1)
Birkeland, Janis. "Neutralizing Gender," Environmental Ethics 17(1995):443-444. A one-page comment. Ecofeminist insights have tended to be recast in a degendered framework. This transformation raises an important question: could a neutered ecofeminism retain its transformative potential? Birkeland is at the Centre of Environmental Philosophy, Planning and Design, University of Canberra, Australia. (EE)

Birnbacher, D., Odpowiedzialno za przyszłe pokolenia / A Responsibility for Future Generations (a translation from German Verantwortung für zukünftige Generationen), Oficyna Naukowa (Scientific Publishers), Warszawa, 1999. (v.13,#1)


Birnbacher, Dieter, "Ethical Principles Versus Guiding Principles in Environmental Ethics." *Philosophica* 39 (1987): 59-76. Important distinction is made between ethical justifications for environmentalism (which require a rigorous theoretical proof) and guiding principles for practical action (which require intuitive effectiveness). Birnbacher supports "sentientism" as an ethical principle, but he upholds "biocentrism" as a practical guide to action, as in Albert Schweitzer's "reverence for all life."


Birnbacher, Dieter. "A Priority Rule for Environmental Ethics." *Environmental Ethics* 4(1982):3-16. Adapting a terminology introduced by Brian Barry, I make a distinction between want-regarding and ideal-regarding principles and apply it to the norms and criteria put forward in environmental ethics. I argue that priority should be given to want-regarding principles over ideal-regarding ones because the former are universalizable while the latter are not, universalizable being understood in the sense of appealing to value premises for which universal assent can be secured. This sense is different both from R. M. Hare's metaethical concept of universalizability and J. L. Mackie's "three stages of universalisation." Birnbacher is in the department of philosophy, Universitat Essen, Essen, Germany. (EE)

Birnie, P. W., Boyle, A.E., eds. *Basic Documents on International Law and the Environment*. New York: Oxford University Press, 1996. 704 pp. $78.40 cloth, $30.40 paper. A collection that includes all the major treaties and other legal instruments relevant to the protection of the environment in international law. Topics covered include the codification and development of international environmental law, marine pollution, the protection of the atmosphere, nuclear risks, control of hazardous substances, and international watercourses. (v7,#4)

Biro, Andrew, "Towards a Denaturalized Ecological Politics," *Polity* 35 (no. 2, 2002):195-212. Argues for reconceptualizing ecological politics for a postmodern era, a "denaturalization" of ecological politics that avoids both the overly romanticized view of nature that is present in some environmental discourses and the radical skepticism of anti-foundationalist critiques of "nature." Postmodern, exemplified here by the social theory of Jean Baudrillard, can be shown to rely on naturalism to sustain its normative critique. Ecocentrism, on the other hand, must make some allowances for the ways in which our understanding of nature is socially constructed. A way around this apparent impasse of postmodern ecological politics. This paper results from a Ph.D. dissertation at York University, 2000. Biro is in political ecology, Acadia University, Canada.


Biro, Andrew. *Denaturalizing Ecological Politics: Alienation from Nature from Rousseau to the Frankfurt School and Beyond*. Toronto: University of Toronto Press, 2005. Biro begins with a critique of deep ecology which supposedly prioritizes nature over culture. He then explicates structuralist and poststructuralist social theorists who claim that nature is solely an effect of social human social structures. Biro then discusses Rousseau, Marx, Adorno, and Marcuse to develop a starting point for a denaturalized rethinking of ecological politics. He argues that an adequate understanding of human ecology must see human beings not as biologically separate from nature but as historically differentiated through their self-conscious transformation of the natural environment. After we grasp the complexities of how nature and the social are intertwined, we can work toward a liberatory human ecology by disentangling social relations and processes that serve to reinforce relations of domination.


Biro, Andrew. *Denaturalizing Ecological Politics: Alienation from Nature from Rousseau to the Frankfurt School and Beyond*. Toronto: University of Toronto Press, 2005. Biro begins with a critique of deep ecology which supposedly prioritizes nature over culture. He then explicates structuralist and poststructuralist social theorists who claim that nature is solely an effect of social human social structures. Biro then discusses Rousseau, Marx, Adorno, and Marcuse to develop a starting point for a denaturalized rethinking of ecological politics. He argues that an adequate understanding of human ecology must see human beings not as biologically separate from nature but as historically differentiated through their self-conscious transformation of the natural environment. After we grasp the complexities of how nature and the social are intertwined, we can work toward a liberatory human ecology by disentangling social relations and processes that serve to reinforce relations of domination.

Bishop, Peter, *The Greening of Psychology: The Vegetable World in Myth, Dream, and Healing*. Dallas, TX: Spring Publications, 1990. Paper. 237 pages. "When we neglect the classical notion of a vegetable soul, with its deep downwardness, the very roots of our lives wither. By exploring the green level of the psyche, this book radically changes our usual notions of what is consciousness and who we are." (v3,#3)


Bittman, Mark, "Today's Fish: Straight From the Farm," *New York Times* (9/18/96): B1. Fish farming: Now like Livestock Production. Many believe that the fish they eat once swam free. To be sure, fish continue to be caught in nets and lines, but the number of fish raised on farms has doubled in the last decade. About 10% of the fish sold today in the U.S. was farm-raised, and 50% of the shrimp comes from farms. Salmon, hybridized striped bass, sturgeon, catfish, and trout are most likely to be farm raised. Tuna, cod, flounder, or swordfish are not. Some of the farmed fish are "made-to-order designer products" "fine-tuned to appeal to the restaurant trade and home consumer." Salmon farmers increase fat content to make salmon extra fatty (as sushi chefs prefer); they withhold fat to make salmon extra lean (for smoked fish); and they add fatty acids to improve the nutritional value of the fish. They augment the feed with pigments to give it the brilliant orange color consumers expect. Striped bass farmers control the amount and type of oil in the feed to adjust the level of fishiness. Fish farmers even use antibiotics and other drugs to treat illness. There are also concerns about water pollution from aquaculture. Norway, the pioneer of salmon farming, has closed fjords to swimming because of high concentrations of fish wastes. (v8,#2)

Bixler, Robert D., Floyd, Myron F. "Nature is Scary, Disgusting, and Uncomfortable," *Environment and Behavior* 29(no.4 1997):443. (v8,#3)

Black, Brian Clyde, *Petrolia: The Landscape of Pennsylvania's Oil Boom, 1859-1873*, 1996, University of Kansas, Ph.D. thesis in environmental history. 425 pages. The tapping of the first commercial oil well in 1859 and the ensuing boom in western Pennsylvania was a revolution in land use--an ecological revolution--that rationalized a method of exploiting the environment and developing resources that was unprecedented. This was a watershed in American attitudes toward future modes of industrial development. The early oil industry helped to shape the ethics with which the broader culture defined acceptable use of natural resources. Americans were given a commodity of such significance that it overwhelmed the meaning of a place and made it worth sacrificing. The advisor was Donald Worster. (v.10,#1)


Blackburn, Simon, *The Oxford Dictionary of Philosophy*. Oxford: Oxford University Press, 1996. Contains the following definition: "Environmental ethics: Most ethics deals with problems of human desires and needs.... The central problem specific to thinking about the environment, is the independent value to place on such things as preservation of species, or protection of the wilderness. Such protection can be supported as a means to ordinary human ends.... But many want to claim a non-utilitarian, absolute value for the existence of wild things and wild places; it is in their very independence of human lives that their value consists. They put us in our proper place, and failure to appreciate this value is not only an aesthetic failure but one of due humility and reverence, a moral disability. The problem is one of expressing this value, and mobilizing it against utilitarian arguments.... See also nature, sublime."


Blaikie, Piers, The Political Economy of Soil Erosion in Developing Countries. London: Longman, 1985. Affluent individuals and large corporations drive an unequal access to natural resources and force millions of persons further to degrade their environments, often on marginal landscapes.

Blakeley, Donald, "Neo-Confucian Cosmology, Virtue Ethics, and Environmental Philosophy," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001): 37-49. This paper explores the extent to which the Confucian concept of ren (humaneness) has application in ways that are comparable to contemporary versions of environmental virtue ethics. I argue that the accounts of self-cultivation that are developed in major texts of the Confucian tradition have important direct implications for environmental thinking that even the Neo-Confucians do not seriously entertain. Blakeley is in the Department of Philosophy, California State University, Fresno. (v.13,#2)

Blakeslee, Sandra, "Drought Unearths a Buried Treasure," New York Times, November 2, 2004. Page D1. Due to protracted drought, Glen Canyon is on its way back, viewable in much of its former glory. Glen Canyon was flooded by the Glen Canyon Dam on the Colorado River in 1963, after a long and unsuccessful fight by David Brower and the Sierra Club to block the dam. Over the next 17 years, water backed up for 186 miles, forming Lake Powell. But since 1999, the lake has lost more than sixty percent of its water. The change may be permanent, since water demands on the reservoir are greater than the annual flow, unless there were to come several hundred year flows in succession. (v.14,#4)


Blaney, Alicia Swaine, Environmental Conservation at Multiple Landscape Scales: An Analysis of the Ethical Past, Present, and Future. M.A. thesis, Colorado State University, summer 2006. Environmental ethics is on the forefront of contemporary ethical thought, but its language is problematic, with different parties meaning different things by similar words, often giving rise to conflict and confusion, even by those who share values in common. We do not have available a universal environmental ethic, but there are convictions broadly shared. Ethics is functional at different levels and goes into a webwork of belief. Further issues arise with institutional divisions of the landscape into private and public, rural lands, park lands, national forest lands, wilderness, often producing fragmentation rather than a comprehensive ethic. If this philosophical confusion is to be overcome, and if land is to be appropriately respected, then there must be a new ethic, one that is "loosely naturalized." Such an ethic will begin with the broad assumption that nature exists and has intrinsic value but that an inclusive ethic will move into the cultural realm where subjective interactions at multiple levels are better able to discover and appropriately respect the objective realities in the natural world.
Blank, GB; Parker, DS; Bode, SM, "Multiple Benefits of Large, Undeveloped Tracts in Urban Landscapes: A North Carolina Example," *Journal of Forestry* 100(no.3, 2002):27-33. (v.13, #3)

Blatter, Joachim, Ingram, Helen, "States, Markets and Beyond: Governance of Transboundary Water Resources," *Natural Resources Journal* 40(no. 2, Spring 2000):439-. (v.12,#2)

Blatz, Charles V., "Ethics, Ecology and Development: Styles of Ethics and Styles of Agriculture", *Journal of Agricultural and Environmental Ethics* 5(1992):59-86. This paper proposes to test the ethical acceptability of four styles of agricultural resource management: (1) contemporary industrial integrated systems agriculture, (2) modern industrial input dependent agriculture, (3) continuous traditional agriculture, and (4) non-continuous traditional agriculture. Blatz is in philosophy at the University of Toledo, Ohio.


Blatz, Charles V., "It is Morally Permissible to Manipulate the Genome of Domestic Hogs", *Journal of Agricultural and Environmental Ethics* 4(1991):166-176. In a debate: Question: Should we manipulate the genome of domestic hogs?


Blichfeldt, George, "An Insight into the Ethical Arguments [against Whaling]." Pages 12-16 in Blichfeldt, Georg, ed., *11 Essays on Whale and Man* (Lofoten, Norway: High North Alliance, 2nd ed., 1994. The scientific conclusions about the sustainability of whales will not support a ban on harvesting whales of certain kinds. So activists switch increasingly to ethical arguments, when the science will not give them the conclusions they want. And other articles on whether whales have rights, intelligence in whales, and interests at stake in the whaling controversy. (v.13,#2)

Bliese, John R. E. "Richard M. Weaver, Russell Kirk, and the Environment." *Modern Age* 38 (1996): 148-58. Conservatives typically ignore environmental concerns, but Russell Kirk and Richard Weaver are prominent traditionalist conservatives who have addressed environmental issues. They reject materialism and argue that what civilization now needs most of all is the practice of self-restraint. They are perfectly willing to have fewer things in return for a healthy environment. They have a fundamental attitude of pious respect for nature as creation. Society is intergenerational and we have an obligation to sustainability. A traditionalist conservative should be horrified at what humans are now doing to the planet. "A traditionalist conservative should be an environmentalist and be foremost among all those who are trying to preserve our temporal home: our earth and all its wonder and all its splendor" (p. 157). Bliese teaches Communication Studies at Texas Tech University. (v7, #3)

Bliese, John R. E. "Traditionalist Conservatism and Environmental Ethics." *Environmental Ethics* 19(1997):135-151. Environmentalism is usually thought to be a liberal political position,
but the two primary schools of thought within the conservative intellectual movement support environmentalism as well. The free market perspective has received considerable attention for its potential contributions to environmental protection, but the traditionalist perspective has not. I consider several important principles of traditionalist conservatism. The traditionalists are not materialists and are highly critical of our consumer culture. They reject ideology and stress piety toward nature, the intergenerational character of society, and prudence in political and social action. These basic principles are a solid foundation for environmentalism.

Bliese is in the Department of Communication Studies, Texas Tech University, Lubbock, TX. (EE)


Blignaut, Peter Erle, Framework for a Socio-Resource Zoning Management Policy for the Conservation and Sustainable Utilisation of the Mountainous Areas of South Africa. University of Cape Town, Department of Environmental and Geographical Science, Ph.D. Dissertation, April 1994. The mountainous environments of South Africa are being steadily degraded due to undesirable agricultural activities, over-burning, erosion, invasive vegetation, afforestation, natural resource exploitation, infrastructural developments and a general attitude that mountains comprise 'waste land' that presently has little conservation status. Environmental management for the sustainable use of mountains is urgently required. Blignaut is a land surveyor and town and regional planner. Address: Blignaut and Rommelaere, P. O. Box 334, Parow 7500, South Africa. (v6,#3)

Bloch, Konrad. "Carnivores, Herbivores, and Omnivores." In Blondes in Venetian Paintings, the Nine-Banded Armadillo, and Other Essays in Biochemistry, pp. 228-241. New Haven: Yale University Press, 1994. The genetic basis of obligate carnivores. Cats, wolves, foxes, raccoons, raptors are obligate carnivores, and must eat flesh. Two carnivores, the giant panda and the black bear have become herbivores, the panda eats only bamboo. Domesticated dogs are not obligate carnivores, although their wild ancestors were. Not too much is known about the genetic basis or obligate carnivores, except for the domestic cat. Four deficiencies are known. Cats lacking taurine and vitamin A, obtained in meat, will go blind from retinal deterioration. Omnivores and herbivores can synthesize taurine, though there is some evidence that taurine deficiency in primates produces less than optimum growth. Bloch is a Nobel laureate biochemist, formerly at Harvard. (v6,#3)


Blomberg, Les, "Clearing the Air: Fourteen Ways to Quiet the Skies," Utne Reader, May-June 2000, pp. 78-79. Blomberg is executive director of Noise Pollution Clearinghouse, which maintains a library and network at www.nonoise.org. A jet plane at takeoff produces 100 decibels of sound, which is 10 million times louder than a normal conversation, and millions of Americans are affected. Seventy percent of Americans live within twenty miles of a major airport. And the skies could be much quieter. (v.11,#2)


Bloom, David E. "International Public Opinion on the Environment." Science 269(1995):354-358. There is concern about the environment in both developing and developed countries; developing countries rate their environments as lower in quality than do developed nations. There is considerable willingness both in developing and developed nations to accept responsibility for environmental problems. The role of governments in addressing national problems and of strong international agencies in addressing transnational issues is recognized. (v6,#3)


Blueprint for a Green Campus: The Campus Earth Summit Initiatives for Higher Education. Pittsburgh, PA, USA: Heinz Family Foundation (3200 CNG Tower, 625 Liberty Avenue, 15222, USA), 1995. Available through Campus Green Vote, 1400 16th St., NW, Box 24, Washington, DC 20036; USA, 202-939-3338. Fax 202-797-6646. In February 1994 over 450 faculty, staff, and students from 22 nations, 6 continents, and all 50 U.S. states met at Yale University in a Campus Earth Summit. Here is their set of recommendations for higher education institutions around the globe to work for an environmentally sustainable future. With sections on ten
recommendations: 1. Integrate Environmental Knowledge into All Relevant Disciplines.  
2. Improve Undergraduate Environmental Studies Course Offerings. 3. Provide Opportunities for 
Students to Study Campus and Local Environmental Issues. 4. Conduct a Campus 
Environmental Audit. 5. Institute an Environmentally Responsible Purchasing Policy. 6. 
Reduce Campus Waste. 7. Maximize Campus Energy Efficiency. 8. Make Environmental 
Sustainability a Top Priority in Campus Land-Use, Transportation, and Building Planning. 9. 
Establish a Student Environmental Center. 10. Support Students who Seek Environmentally 
Responsible Careers.

Bluhdorn (Blüdorn), Ingolfur, Post-Ecologist Politics: Social Theory and the Abdication of the Ecologist Paradigm. London: Routledge, 2000. A post-modernist critique of green political theory. The author criticizes existing green political theory for wanting to change the world, rather than taking it as given and seeking to "green" it, attempting to work with, rather than against, the grain of modern market-based economy. The dynamics of development of modern society are going in an anti-ecological direction. Ecologically-committed thinkers are therefore naive and unrealistic in thinking they can alter this. Therefore they should abandon "castle-building" and get "sociologically real," that is, seek to accommodate and tailor the "ecological project" to the "reality" of advanced, market-based, high consumption society. Reviewed by John Barry, Environmental Values 13(2004):127-130. (EV)


Blühdorn, Ingolfur. Post-Ecologist Politics: Social Theory and the Abdication of the Ecologist Paradigm. London: Routledge, 2000. An extreme social constructivist. "The concept of the environmental crisis is dubious" (p. 14), but there is a "crisis of the eco-movement" (p. 30), which is now found to be socially constructed. But it is true that nature has been abolished, because it is no longer possible to believe in the existence of a realm of pure objective nature separated from and underlying culture. So we will need a post-ecologist politics. "Ecological thought ... has to become fully anthropocentric and turn into social theory" (p. 39). Nevertheless,
Blühdorn concedes that most of the rainforest is gone and that there is great loss of biodiversity. Reviewed by Smith, Mick, "Negotiating Nature: Social Theory at its Limits?", Environmental Politics 11 (no. 2, 2002):181-186. (v.13,#4)

Blum, Deborah, The Monkey Wars. New York: Oxford University Press, 1995. 306 pp. $ 25. Traces the history of the conflicts over primate experimentation and research. Blum seeks a middle ground where both human and animal lives count, and where we can honestly and calmly ponder the pain/gain equation, how much pain we are willing to inflict to reduce human pain. She finds, for instance, that there will probably be no vaccine for AIDS found without primate research. Blum is a science writer for the Sacramento Bee who received a Pulitzer Prize for an earlier series of newspaper articles on this subject. (v5,#4)

Blum, Elizabeth D. Love Canal Revisited: Race, Class, and Gender in Environmental Activism. Lawrence: University Press of Kansas, 2008. Blum argues that Love Canal shows how environmental activism opened up a window on broader social movements and highlighted a legacy rooted in race, class, and gender. She goes beyond headline people such as Lois Gibbs to show how marginalized black women fought to be heard, women who rejected feminism because of a perceived anti-family stance fought as activists for their rights, working class men found their wives in the front lines of activism instead of in the kitchen, and the white, middle class Ecumenical Task Force helped black residents negotiate legal obstacles for relocation and compensation.

Blumener, Earl, "Entrepreneurial Environmentalism: A New Approach for the New Millennium," Environmental Law 30 (No. 1, 2000): 1-. As the environmental movement enters the new millennium, it must confront an array of hurdles. Faced with political stalemate concerning environmental remedies and policy and shrinking public revenues and resources, Congressman Blumener suggests adoption of an entrepreneurial environmentalism strategy. Environmentalism in the coming millennium, according to Congressman Blumener, must provide comprehensive solutions, use "cheap and green" strategies, look to performance based regulations, and encourage economic incentives. (v.11,#4)

Blumenthal, Dana, "Interrelated Causes of Plant Invasion," Science 310(14 October 2005):243-244. Invasive plant species flourish because they land on disturbed sites, similar to those from which they came, but with more resources (such as fertilizer), they have a life-history strategy of making many seeds rather than protecting themselves for long-lives; they are released from their natural enemies (left back where they came from), meanwhile the natives still have their natural enemies to compete with. These factors compound to make invasives especially disruptive to natural systems. Blumenthal is with the USDA Agricultural Research Service Rangeland Research Unit, Fort Collins, CO.


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

Blumm, Michael C. "The End of Environment Law? Libertarian Property, Natural Law, and the Just Compensation Clause in the Federal Circuit." Environmental Law 25 (no. 1, 1995):171- . Florida Rock Industries and Loveladies Harbor, two recent cases from the Federal Circuit, represent a radical, libertarian view of property and are not supported by either Supreme Court opinions or the history of American property law. (v6,#1)


Blumm, Michael C. "Seven Myths of Northwest Water Law and Associated Stories." Environmental Law 26, no.1 (1996): 141. Blumm debunks seven common myths that have long hampered a full understanding of water rights allocation in the Northwest. (v7, #3)

Boal, Frederick W. and David N. Livingstone, eds., The Behavioural Environment: Essays in Reflection, Application, and Re-evaluation. London and New York: Routledge, 1989. Hardbound, 337 pages. Humans behave in their world according to the way they perceive it to be, and this is not always, perhaps not often, the way the world really is. "Decision-makers operating in an environment base their decisions on the environment as they perceive it, not as it is. The action resulting from their decision, on the other hand, is played out in a real environment" (p. 9). These "filtered worlds" (p. 290) are what the late William Kirk, longtime geographer at the Queen's University of Belfast called "the behavioral environment," and two of his colleagues have edited this collection of sixteen essays evaluating that idea. Kirk held that "the behavioral environment" specified the essence of geography and provided it with a unifying model. Geography arises where humans perceive natural systems, and that subjective gestalt, "the behavioral environment," shapes human actions in their worlds, with the real "phenomenal world" responding sometimes more sometimes less than as perceived. The authors here offer sophisticated appraisals of how this model has fared over the last forty years. Perception is important, but is it the essential concept of geography? Somehow, the entwined destinies of nature and culture does seem to be the domain of geography, which could make it a quite relevant science blending the subjective in human perception with the objective in landscapes. (v1,#3)


Bocking, Stephen. "The Power Elite." Alternatives 23 (no.2, 1997): 14. The Bakun Dam will Flood 69,000 hectares of tropical forest, and displace thousands of people, to generate at great cost, electricity for which there is no immediate market. (v8,#2)

Bodansky, Daniel, "The Legitimacy of International Governance: A Coming Challenge for International Environmental Law," American Journal of International Law 93(1999):596-624. There is a perception that international environmental law is insufficiently democratic, also questions about public participation and expertise. Analysis and research is needed to understand how such factors as public participation, scientific expertise, and consent work in particular contexts to help legitimate international governance. Bodansky is professor of law, University of Washington. (EE v.12,#1)


Boersema, Jan J. "How to Prepare for the Unknown? On the Significance of Future Generations and Future Studies in Environmental Policy," Environmental Values 10(2001):35-58. The core question of this article is: how can we take account of the future and future generations if our knowledge of the future is so sparse? The importance of the future is discussed within the framework of our (linear) concept of time. After that it is argued that future generations do not constitute a new, let alone unique, element in the debate on the future. Two different routes to acquire knowledge about the future and prepare for the future are described. Both reflect facts and values of the present and the past instead of giving an accurate picture of the future. Finally
the view is defended that future-focused activity should be based to a greater extent on durable principles. Some of these durable principles are presented and discussed. KEYWORDS: Time, future, future generations, durable principles, environmental policy. Jan Boersema is at the Centre of Environmental Science, Leiden University, The Netherlands. (EV)

Boersema, Jan J. "Environmental Quality and the Quality of our Way of Life." Environmental Values 4(1995):97-108. Today, sustainable development is generally accepted as a guiding principle. The present relation societies have with the natural environment is considered as being not-sustainable. However this presupposes some idea about the quality of the environment and of activities affecting the environment and, as a consequence, of the quality of life. In this article I defend the proposition that the limited progress made with respect to the environment - despite all the good intentions - could be due to a potential conflict between `quality' and sustainable development. In other words: our interpretation of the concept of `quality' is not compatible with the aims of sustainability. Some consequences for research and policy of accepting this proposition are discussed. KEYWORDS: Quality, sustainable development, lifestyle. Boersma is at the Centre of Environmental Science, University of Leiden. (EV)

Boersma, PD; Kareiva, P; Fagan, WF; Clark, JA; Hoekstra, JM, "How Good Are Endangered Species Recovery Plans?" Bioscience 51(no. 8, 2001):643-650. (v.13,#1)

Boetzkes, Elisabeth A. and Janson Scott Robert. "Toward an Inclusive Health Ethic for Humans and Ecosystems." Ethics and the Environment 5(2000):143-152. ABSTRACT: Health care ethics has long been concerned with the ethical issues faced by the human individual, issues such as consent, bodily privacy, and autonomy. Since at least the 1970s, however, we have known that health is largely a function of factors extending beyond the individual. Some recent and laudable ethical work has begun to take seriously the social determinants of health. For instance, deciding what would be a just distribution of the social good of health care engages health ethics with social philosophy (e.g., Weston 1991). Raising the health profile of individuals likewise requires social reforms in employment, work hierarchy, early childhood care, and economic equality-all of which have been found to be important determinants of human health e.g. Ontario 1991). Even the issues of consent and autonomy are currently being contextualized, as the relevance of Such factors as intimate relationships and power asymmetries is recognized (Sherwin 1992). Many researchers now acknowledge that the tendency to reduce health ethics is sues to the individual is misleading. For instance, Henry T. Greely (1997) has argued that because most genetics research is, in fact, research about groups-families, the class of people with a particular disease, isolated communities, or ethnic groups, then groups are certainly an appropriate further object of ethical consideration. Fur thermore, geneticist, epidemiologist, and ethicist Abby Lippman laments the (often unjustified) tendency to consider genetic contributions to ill health as more manageable, less intractable, than social contributions. (E&E)

Boff, Leonardo, Cry of the Earth, Cry of the Poor. Maryknoll, NY: Orbis Books, 1997. 242 pages. $ 22.00. Focuses on the Amazon, the economic and metaphysical ties that bind the fate of the rainforests with that of the indigenous peoples there. Boff is a Brazilian theologian. (v.11,#1)
Boff, Leonardo, *Cry of the Earth, Cry of the Poor*. Maryknoll, NY: Orbis Books, 1997. 242 pages. $22.00. Focuses on the Amazon, the economic and metaphysical ties that bind the fate of the rainforests with that of the indigenous peoples there. Boff is a Brazilian theologian. (v10,#4)


Bohannon, John. *The Big Thaw Reaches Mongolia's Pristine North.* @ *Science* Vol. 319, no. 5863 (1 February 2008): 567-68. Mongolia at high latitudes has been warming twice as fast as the global average, and unique ecosystems are being transformed. Four of the worst drought years on record occurred in the past decade. The landscape permafrost is melting, making the land spongy, and the land is drying out, although intense storms have grown more frequent. Wildfires are more likely. Mongolian herders find it increasingly difficult with too many animals on drier lands, making for an overgrazed steppe and leaving behind shrubby wasteland and sparse semi-desert. They face disaster.


Bohn, Thomas; Amundsen Per-Arne, "Ecological Interactions and Evolution: Forgotten Parts of Biodiversity?, *BioScience* 54(no.9, 1 September 2004):804-805(2).


Boime, Eric. Environmental History, the Environmental Movement, and the Politics of Power. @ History Compass Vol. 6, no. 1 (2008): 297-313. While environmental history subsumes much more than the environmental movement, this movement remains standard, not to mention depressing, subject fodder in environmental history courses. Boime examines two emerging patterns in the historiography of environmental politics. The first is a vigorous focus on local, non-traditional, grassroots endeavors; these works spotlight unique and innovative coalitions that challenge the inevitability of class, race, and regional wedges. The second pattern examines the field's new cultural emphasis, particularly its concentration on hybrid landscapes and the explicit attack on preservationist ideology. Both patterns offer unique challenges to traditional depictions of the environmental movement as well as to each other.


Boman, Carol R. "Ethics and the Transactional Attorney: Confronting Reality in an Imperfect World." Natural Resources and Environment 10, no.4 (1996): 38. (v7, #3)


Bonahue, Brian, "History, Work, and the Nature of Beauty: A Massachusetts Community Forest," *Journal of Forestry* 98(no.11, NOV 01 2000):36- . The Weston Town Forest is the setting for lessons about biodiversity, sustainable forestry, and the beauty of being actively engaged with the history of the forest. (EE v.12,#1)

Bonan, Gordon B. *Forests and Climate Change: Forcings, Feedbacks, and the Climate Benefits of Forests.* @ *Science* Vol. 320, no. 5882 (13 June 2008): 1444-49. This paper is part of a themed issue of *The Future of Forests* with half a dozen perspectives on the futures of forests, their management, and the role in climate change.

Bond, E. J., *Ethics and Human Well-Being: An Introduction to Moral Philosophy.* Oxford: Blackwell Publishing Co., 1996. Animals appear in an extended footnote. "Rights and justice, which are inseparable, and all the conceptual apparatus that goes with them--reparation, desert, earned merit, punishment, requirement to respect the rights of others--make sense only in connection with persons, and if they seem to make sense with such animals as dogs, cats, and horses that is because of these animals' long association and close relationships with human beings, who may think of them and treat them as if they were persons. ... This is not to say we do not have a moral responsibility toward many species of non-human animals; for their care if they are domestic animals ... or for wild animals in captivity. It is also our responsibility to preserve the habitat of animals in the wild and not to wantonly destroy species after species..." (pp. 247-248). Bond is in philosophy at Queen's University, Kingston, Ontario. (v7,#4)

Bond, Ivan, "The Importance of Sport-Hunted African Elephants to CAMPFIRE in Zimbabwe," *TRAFFIC Bulletin* 14 (1994): 117-119. Hunting of elephants brought over $9 million to Zimbabwe, distributed under the Communal Areas Management Program for Indigenous Resources (CAMPFIRE) to local peoples. Some 60 elephants were killed, in a population of 76,000 elephants, and five of these would have been destroyed in any case as problem animals. Hunters are mostly Americans, some Europeans. Local peoples have a much more positive attitude toward elephants when they see these benefits; they now discourage and report the poachers. CITES permits such hunting, but not the sale of elephant products, and this costs these rural communities about $1 million annually. Pragmatists will love this, but the author does not examine the ethical impact, either on Zimbabweans, Americans, or elephants of having wealthy Americans lay out up to $35,000 to put down a trophy elephant, with trickle-down benefits to poor Zimbabweans whose annual incomes are a small fraction of this. Bond is with World Wildlife Fund in Harare, Zimbabwe. (v6,#2)

Bonds, MH; Pompe, JJ, "Calculating Wetland Mitigation Banking Credits: Adjusting for Wetland Function and Location," *Natural Resources Journal* 43(no.4, 2003):961-978. (v. 15, # 3)

Bonenberg, M. M., *Cz oowiek i Ziemia (Human and Earth)*, Polska Akademia Nauk (Polish Academy of Sciencess Press), Kraków, 1999. (v.13,#1)

Bonenburg, Marek M., (Philosophy, Jagellonian University of Cracow), Etyka Srodowiskowa: Zalozenia i Kierunki (= Environmental Ethics: Assumptions and Trends). In Polish. Cracow: Jagellonian University, Institute of Philosophy, 1992. 152 pages. Softcover. There is a brief English summary at the end. This is the first book on environmental ethics published in Poland and presents, in short chapters, the main trends in contemporary environmental ethics. Nine approaches to environmental ethics are analyzed, the approaches by Tom Regan, Robin Attfield, Paul Taylor, Aldo Leopold and J. Baird Callicott, Arne Naess, Holmes Rolston, James Lovelock, Edward Goldsmith, and Henryk Skolimowski. The author concentrates on the theoretical justifications of each ethical position and also on its practical consequences. On one side, there is a tendency to concentrate on human relations with nonhuman individuals; on the other there is a tendency to emphasize duties toward ecosystems. Sample chapter titles (translated from Polish): Chapter 1: The Basic Theses of Environmental Ethics. Chapter 2. The Theory of Respect for Nature of Paul Taylor. Chapter 6: Deep Ecology. Chapter 7: The Ecocentric Theory of Holmes Rolston, III. (Thanks to Jan Wawrzyniak.) (v4,#1)


Bongaarts, John, "Population Policy Options in the Developing World," Science 263 (February 11, 1994):771-776. The population of the developing world is currently expanding at the unprecedented rate of more than 800 million per decade, and despite anticipated reductions in growth during the 21st century, its size is expected to increase from 4.3 billion today to 10.2 billion in 2100. Past efforts to curb this growth have almost exclusively focused on the implementation of family planning programs to provide contraceptive information, services, and supplies. These programs have been partially successful in reducing birth rates. Reproduction rates have declined, often impressively, and the use of contraception has risen, statistically, from 10% to 50%. Further investments in these programs will have an additional but limited impact on population growth; therefore, other policy options, in particular measures to reduce high demand for births and limit population momentum are needed. The problem is increasingly not the unwanted but the wanted child. A serious problem is "population momentum," the tendency of a population to increase dramatically even after birth rates are reduced to a replacement level.


Bonner, Raymond, At the Hand of Man: Peril and Hope for Africa's Wildlife. New York: Alfred A. Knopf, 1993. 322 pages. $ 24.00. Bonner thinks there has been much folly in Western led efforts at wildlife conservation in Africa. He is especially critical of the World Wildlife Fund (WWF) or World Wide Fund for Nature and the Africa Wildlife Fund. He thinks that these funds have used the ban on the ivory trade, for instance, to increase membership and donations, while a controlled sale of ivory would have been more effective at saving elephants. These funds have been too interested in the animals, and not interested enough in the Africa peoples, whose fortunes are tied to those of the animals. Bonner is a former New York Times correspondent. (v4,#2)


Bonnicksen, Thomas M., America's Ancient Forests: From the Ice Age to the Age of Discovery. New York: John Wiley and Sons, 2000. How the North American forest landscape evolved over the past 18,000 years. A special feature of the book is its self-contained introduction to the early history of Native American peoples and their environment. The author draws on his roots in the Osage nation as well as historical research, and claims that the cultural practices of hunting, agriculture, and fire helped form the ancient forests. "This saga is not just about climate and trees. Native Americans were an integral part of America's forests. The forest and the people who lived there formed an inseparable whole that developed together over the millennia. ... Native Americans helped to create and sustain the ancient forests that Europeans found

Bonnie, R; Schwartzman, S; Stier, SC; Siebert, SF, "Tropical Reforestation and Deforestation and the Kyoto Protocol", Conservation Biology 17(no.1, 2003):4-5.


Boo, Elizabeth. Ecotourism: The Potentials and Pitfalls. 2 vols. Washington, DC: World Wildlife Fund, 1992. Especially Belize, Costa Rica, Dominica, Ecuador, and Mexico. Provisions must be made for protecting the "carrying capacity" of natural sites; local people must have a say in the management of ecotourism; and resources must be invested in access to and care of the amenities. But here is a cautious recommendation of ecotourism. (v.6,#1)

Boody, George et al., "Multifunctional Agriculture in the United States", BioScience 55 (no.1, January 2005):27-38(12). We evaluated possible changes to current farming practices in two Minnesota watersheds to provide insight into how farm policy might affect environmental, social, and economic outcomes. Watershed residents helped develop four scenarios to evaluate alternative future trends in agricultural management and to project potential economic and environmental outcomes. We found that environmental and economic benefits can be attained
through changes in agricultural land management without increasing public costs. The magnitude of these benefits depends on the magnitude of changes to agricultural practices. Environmental benefits include improved water quality, healthier fish, increased carbon sequestration, and decreased greenhouse gas emissions, while economic benefits include social capital formation, greater farm profitability, and avoided costs. Policy transitions that emphasize functions of agriculture in addition to food production are crucial for creating change. We suggest that redirecting farm payments by using alternative incentives could lead to substantial environmental changes at little or no extra cost to the taxpayer.


Bookchin, Murray, Remaking Society: Pathways to a Green Future. Boston: South End Press, 1990. Pp. 222. A recent and compact expression of Bookchin's central ideas. A leading environmentalist and social critic, Bookchin was inspired to write the book to answer the growing deep ecology trend in environmental philosophy and politics. The deep ecological emphasis on "biocentrism" ignores social theory; it is not humans that are the problem, but social classes and institutions of power which dominate and distort human life. Social institutions have to be remade: "the harmonization of nature cannot be achieved without the harmonization of human with human" (p. 171). Deep ecology is a mindless irrationalism or mysticism that denies the "the place of rationality in life" as the "product of a natural development." Humanity is an "agent for rendering evolution...fully self-conscious...[and]...as rational as possible in meeting non-human and human needs" (p. 204). The debate between the "social ecologists"---followers of Bookchin---and the "deep ecologists" is one of the most disturbing and contentious in the field of environmental philosophy. Bookchin's argument seems based on misunderstandings and extreme interpretations of isolated out-of-context statements. (Katz, Bibl # 2)

Bookchin, Murray, "Recovering Evolution: A Reply to Eckersley and Fox," Environmental Ethics 12(1990):253-274. Arguing that they have seriously misrepresented his views, Bookchin defends his "social ecology" from criticisms of two deep ecologists. The primary issue is the extent and desirability of the human control over nature. Bookchin argues for a "symbiotic relationship between human communities and the nonhuman ecocommunities in which they are located" (p. 259). But he also claims that it is not anthropocentric to diversify an ecological region for the betterment of human life, as long as the project is "very prudent, nonexploitative, and ecologically guided" (p. 272). (Katz, Bibl # 2)

Bookchin, Murray, Which Way for the Ecology Movement. Edinburgh and San Francisco: AK Press, 1993. 75 pages. Bookchin is an anarchist who argues that although the problems are extreme, environmentalists have in general gotten the causal sequence backward. Mass poverty, starvation, dispossession, slums, and alienation is not the result of overpopulation, nor the cause of environmental degradation. Rather these crises of human dysfunction and environmental breakdown are the result of a driving capitalism dependent on growth and consumerism. People have been shoved off the land all over the world by agribusiness. Environmentalists have not understood the true causal forces. Humans are capable of changing these institutional forces, but not until they are correctly understood. (v6,#4)
Bookchin, Murray. *Remaking Society: Pathways to a Green Future*. (Boston: South End Press, 1990. 204 pages. $10 paper. Social ecologist Murray Bookchin explores the origins of the humans-over-nature hierarchy to find it originates in dominance hierarchies within human societies. These go back to the ascendance of elders in early human society and the dominance of warrior males over other men and nearly all women. It continues in the dominance of nation-states and multi-national corporations. Such hierarchies warp the creative powers of humanity in the service of power rather than of life. Bookchin's ideal is a rational, ecologically oriented society using its cultural achievements for its own benefit and for that of the natural world. Bookchin dislikes the atavistic mystical tendencies he sees emerging in ecofeminists, deep ecologists, and some members of Green political parties. Bookchin is director emeritus of the Institute for Social Ecology in Vermont. (v1,#3)


Bookchin, Murray. "Recovering Evolution: A Reply to Eckersley and Fox." *Environmental Ethics* 12(1990):253-74. Robyn Eckersley claims erroneously that I believe humanity is currently equipped to take over the "helm" of natural evolution. In addition, she provides a misleading treatment of my discussion of the relationship of first nature (biological evolution) and second nature (social evolution). I argue that her positivistic methodology is inappropriate in dealing with my processual approach and that her Manichaean contrast between biocentrism and anthropocentrism virtually excludes any human intervention in the natural world. With regard to Warwick Fox's treatment of my writings, I argue that he deals with my views on society's relationship to nature in a simplistic, narrowly deterministic, and ahistorical manner. I fault both of my deep ecology critics for little or no knowledge of my writings. I conclude with an outline of a dialectical naturalism that treats nature as an evolutionary process—not simply as a scenic view—and places human and social evolution in a graded relationship with natural evolution. I emphasize that society and humanity can no longer be separated from natural evolution and that the kind of society we achieve will either foster the development of first nature or damage the planet beyond repair. Bookchin is at the Institute for Social Ecology, Plainfield, VT. (EE)


not a national park but designated as a conservation area to permit its use by Masai agro-pastoralists. This research examines the extent to which cultivation (in addition to grazing) impacts wildlife. There is no cultivation in the Crater, though there is some grazing. The authors conclude that the present cultivation patterns on surrounding lands (less than one percent of the area) is not overly detrimental to wildlife (or livestock) populations. But they express concern that increased cultivation increases the Masai population, non-Masai peoples are immigrating into the area to take advantage of cultivation, and cultivation cannot increase proportionately to population increase without both stressing wildlife populations and making the people increasingly dependent on relief aid. Boone is in the Natural Resource Ecology Laboratory at Colorado State University.


Boonin-Vail, David. "The Vegetarian Savage: Rousseau's Critique of Meat Eating." Environmental Ethics 15(1993):75-84. Contemporary defenders of philosophical vegetarianism are too often unaware of their historical predecessors. In this paper, I contribute to the rectification of this neglect by focusing on the case of Rousseau. In part one, I identify and articulate an argument against meat eating that is implicitly present in Rousseau's writings, although it is never explicitly developed. In part two, I consider and respond to two objections that might be made to the claim that this argument should be attributed to Rousseau. In part three, I consider how Rousseau's argument might fit into a general typology of recent discussions of vegetarianism, and argue that the eclectic nature that is revealed in doing so shows that the argument is worthy of further consideration. Boonin-Vaill is in the Department of philosophy, Georgetown University, Washington, D. C. (EE)


Booth, Annie L., and Harvey M. Jacobs, "Ties That Bind: Native American Beliefs as a Foundation for Environmental Consciousness," Environmental Ethics 12(1990):27-43. A discussion of the basic themes of several American Indian views of nature, and the fit of these views into deep ecology, ecofeminism, and bioregionalism. Native American belief systems can be used as models for the development of an environmental consciousness. (Katz, Bibl # 2)

Booth, Annie L. "Does the Spirit Move You? Environmental Spirituality." Environmental Values 8(1999):89-105. ABSTRACT: This article looks at the idea of spirituality as it is discussed within ecophilosophical circles, particularly ecofeminism, bioregionalism, and deep ecology, as a means to improve human-nature interactions. The article also examines the use each ecophilosophy makes of a popular alternative to mainstream religion, that of Native American spiritualities, and problems inherent in adapting that alternative. KEYWORDS: Spirituality, ecospirituality, deep ecology, ecofeminism, bioregionalism, ecophilosophy. Annie L. Booth, Faculty of Natural Resources and Environmental Studies University of Northern British Columbia 3333 University Way Prince George, British Columbia V2N 4Z9, Canada. (EV)

Booth, Annie L., and Harvey L. Jacobs. "Ties that Bind: Native American Beliefs as a Foundation for Environmental Consciousness." Environmental Ethics 12(1990):27-43. In this article we examine the specific contributions Native American thought can make to the ongoing search for a Western ecological consciousness. We begin with a review of the influence of Native American beliefs on the different branches of the modern environmental movement and some initial comparisons of Western and Native American ways of seeing. We then review Native American thought on the natural world, highlighting beliefs in the need for reciprocity and balance, the world as a living being, and relationships with animals. We conclude that Native American ideas are important, can prove inspirational in the search for a modern environmental consciousness, and affirm the arguments of both deep ecologists and ecofeminists. Booth and Jacobs are at the Institute for Environmental Studies, University of Wisconsin-Madison, Madison, WI. (EE)


Booth, Annie L. "Learning from Others: Ecophilsophy and Traditional Native American Women's Lives." Environmental Ethics 20(1998):81-99. I examine the roles of traditional Native American women with regard to their impact on maintaining appropriate spiritual, cultural, and physical relationships with the natural world and discuss lessons that ecophilsophers might find useful in reexamining their own spiritual, cultural, and physical relationships. Booth is in the Environmental Studies Program, University of Northern British Columbia, Prince George, B.C. (EE)


Booth, Douglas E. "The Economics and Ethics of Old-Growth Forests." Environmental Ethics 14(1992):43-62. An intense debate is currently underway in the Pacific Northwest over whether remnant old-growth forests should be preserved or harvested. Old-growth forests can be viewed (1) as objects used instrumentally to serve human welfare or (2) as entities that possess value in
themselves and are thus worthy of moral consideration. I compare the instrumental view suggested by economic analysis with the biocentric and ecocentric alternatives and suggest a reconciliation of these approaches in the context of old-growth preservation. Booth is at the College of Business Administration, Marquette University, Milwaukee University, Milwaukee, WI. (EE)


Booth, Douglas, *Valuing Nature: The Decline and Preservation of Old Growth Forests*. Lanham, MD: Rowman and Littlefield, 1993. 245 pages. $22.95 paper. $57.50 cloth. The shifting values in natural resources policy decision-making set the stage for a more focused debate on the ethical criteria that should be employed. The natural history of old-growth forests, aboriginal views of forests, valuing forests in the era of exploitation, the Endangered Species Act and old-growth forests. How should old-growth forests be valued? Booth is professor of economics at Marquette University. (v4,#3)

Booth, Douglas E., "Ethics and the Limits of Environmental Economics," *Ecological Economics* 9(1994):241-252. There are limits to the cost-benefit framework, given the acceptance of an ethic of environmental concern. Two approaches to environmental ethics are considered: one based on the view that humans are the focus of moral concern, the other holding that moral concern ought to be extended to the nonhuman world. In the first case, cost-benefit analysis can legitimately be applied so long as those humans who suffer loses from environmental damage are adequately compensated. But even in human cases, the application of cost-benefit analysis is inconsistent with the moral considerability of humans in cases where damage is harmful to human health and also in cases where the natural environment is so highly valued that the compensation of damaged parties is infeasible. In the second case, cost-benefit analyses cannot legitimately be applied where nonhuman entities are morally considerable. Booth teaches economics at Marquette University. Any philosopher who thinks that economists do not do their philosophical homework should read the preceding three articles. (v5,#4)

Booth, Douglas E. "Preserving Old-Growth Forest Ecosystems: Valuation and Policy," *Environmental Values* 6(1997):31-48. ABSTRACT: If valuation processes are dualistic in the sense that ethical values are given priority over instrumental values, and if old-growth forests are considered to be valuable in their own right, then the cost-benefits approach to valuing old growth is inappropriate. If this is the case, then ethical standards must be used to determine whether preservation is the correct policy when human material needs and ecosystem preservation are in conflict. Such a standard is suggested and evaluated in the context of the policy debate over the preservation of spotted owl habitat in the Pacific Northwest region of the U.S. Economics Department, Marquette University, Milwaukee, WI 53233, USA. (EV)


Booth, Peter, *Anarchism and the Environmental Crisis*, Master's Thesis, Department of Philosophy, Lancaster University, September 1994. (v7,#1)

Booth, William, "Developers Wish Rare Fly Would Buzz Off," *Washington Post* (4/4/97) A1. Endangered fly creates controversy. The Delhi Sands flower-loving fly is the only fly on the U.S. endangered species list. In order to protect its rare habitat of inland dunes, the U.S. Fish and Wildlife Service is requiring officials in Southern California to move the footprint of a new hospital (at an alleged cost of $4 million) and to rethink a planned massive industrial development (that is supposed to create 20,000 jobs over 5 years). Critics are charactering the issue as "jobs versus flies" and casting aspersions at the fly and its habitat. The reporter describes the fly as "a creature that spends most of its life underground, living as a fat, clumsy, enigmatic maggot." Says a State Senator, "I'm for people, not for flies." The habitat, says another official, is "a bunch of dirt and weeds. I can't take a citizen out there without them becoming outraged." Some claim that the Fish and Wildlife Service was considering slowing interstate traffic through the dunes to a crawl during the fly's summer mating season, "lest at fly become a glop on an unsuspecting motorist's windshield." The entomologist responsible for getting the fly listed as endangered in 1993 says the fly "is spectacular . . . If you see one flying around you don't soon forget it." The fly is an inch long and is able to hover like a hummingbird above flowers using a long straw for a mouth to extract nectar. The geology and biology professor who wrote the recovery plan for the fly says "It's a fly you can love. It's beautiful. Nothing is too wonderful to be true in the world of insects." Females of the species telescope their bodies three inches into the sand to deposit a clutch of eggs. The Delhi Sands is the largest remaining sand dune system in the Los Angeles basin, a unique environment that supports not only the fly but also rare and precious flowers, pocket mice and butterflies. This case raises the issue of species egalitarianism and illustrates the argument strategies of both Endangered Species Act opponents and proponents. (v8,#1)


Borchert, Peter and Maria Jones, "The Environment Must Win: South Africa's Elections," *Africa - Environment and Wildlife* 2(no.2, March/April 1994):20-26. In South Africa, the need for social upliftment is crucial but many are concerned that the clamor for short-term reparation and economic success could exacerbate the environmental ills that already beset the land. Politicians must be encouraged to acknowledge that the promise of better times is irrevocably linked to a
healthy environment. Most of the political parties have fairly well-articulated environmental policies, but this can prove little more than lip service, and South Africa is out of step with developed western nations that do pay serious attention to environmental problems. Some think that a preoccupation with environmental issues is the mark of a privileged few who put the welfare of animals over that of humans. In fact South Africa's biodiversity is one of its major assets.

Tourism is only part of the answer. At worst, ecotourism is an international hotel group putting up a pleasure palace on the edge of a game reserve, staffed with its international staff, and repatriating the profits taken from overseas tourists. At best, ecotourism is "purposeful travel to natural areas, to understand the cultural and natural history of the environment, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make conservation of natural resources beneficial to local people" (Ecotourism Society). South Africa ought considerably to enlarge its share of the market in better ecotourism. However, the market is finite, the demand can be met with relatively small areas of more or less pristine ecosystems and is generally feasible in a few prime areas, and it is intrinsically unstable, evaporating in time of war, political instability, shifting exchange rates, disease epidemics, perceived personal dangers, and so forth. The larger answer is a spectrum of benefits from conserved natural resources that reach large numbers of ordinary people. Borchert is editor of Africa - Environment and Wildlife; Johns is a freelance journalist. (v6,#3)

Borchert, Peter, "Destination Africa: Turning a Dream into Reality," Africa - Environment and Wildlife 3(no. 3, May/June 1995):27-35. Travel and tourism is, by some measures, the world's largest industry, globally people spend more on tourism than they do for food. Africa offers unparalleled opportunities for tourism, especially its impoverished nations that seem to have little else to offer the world economy other than access to places of great natural beauty. But ecotourism is a mixed bag; done wrong it destroys the assets on which it is based, benefits the rich and not the poor, and escalates further consumption of fuel, water, and materials. Done right it can offer a rational and sustainable use of the continent's great assets in a manner that involves and is of benefit both to Africans and African wildlife. "Tourism is the way in which individuals can savour the unknown, acquire understanding and experience the world in its fullness. Furthermore, tourism stands out as a positive and ever-present factor in promoting mutual knowledge and understanding, and therefore peace and detente" (United Nations World Tourism Organisation, The Hague Declaration on Tourism, 1989). Borchert is editor of Africa - Environment and Wildlife. (v6,#3)


Borenstein, Seth, "Study Finds Oceans in Crisis, but Fixable," Philadelphia Inquirer, June 5, 2003, A21. The Pew Oceans Commission report, a three-year, $ 5.5 million study, finds that the oceans bordering the U.S. are overfished, polluted, infested with invasive species, dotted with dead zones, and in a state of crisis, but they can be saved. Bringing the oceans' ecosystems back from the edge of collapse requires dramatic, controversial and expensive efforts to limit fishing, coastal development, and runoff from cities and farms.
Borgmann, Albert, "The Challenge of Nature," Chapter 22, pages 182-196, in Technology and the Character of Contemporary Life: A Philosophical Inquiry. Chicago: University of Chicago Press, 1984. "Nature in its wildness attains new and positive significance within the technological setting. ... Nature constitutes a singular challenge for technology in this country; especially nature in its pristine or wild state. In this latter sense, nature is in an obvious way the counterpart to technology. It is by definition a part of the world that has not been touched by the hand of technology. But though there is a clear distinction between wilderness and technology, it is much less clear why we should prevent technology from crossing the physical counterpart to that distinction and from penetrating the remaining wilderness areas. ... (p. 182)

Wilderness offers some experiences that technology does not. "In the wilderness, time and space are restored to us." "The wilderness is eminently deep." "In all these experiences of the wilderness we also experience ourselves in a new way" (pp. 191-192). "We can learn from the wilderness that pretechnological things are not mere forlorn remnants of an irretrievable order but attain a new splendor in the midst of technology. They teach us both to accept and to limit technology in a principled and sensible way. They allow us to be more fully human in offering us engagement, in calling forth a new maturity, and in demanding a rightful discipline" (pp. 195-196). Borgmann is in philosophy at the University of Montana, Missoula.

Borgmann, Albert. "Gender, Nature, and Fidelity," Ethics and the Environment 4(1999):131-142. Contemporary discussions of gender and nature are likely to suffer from two vexations, the conflict of constructivism and naturalism and the conflict of nativism and rationalism. As a solution to the first I propose postmodern realism and as a remedy for the second a notion of careful scholarship. With the solutions laid out, I will illustrate and test them by discussing friendship and fidelity within the scope of gender and nature. Borgman is in philosophy at the University of Montanta. (E&E)

Borgmann, Albert. Real American Ethics: Taking Responsibility for our Country. Chicago: University of Chicago Press, 2006. Borgmann discusses the institutions and tangible structures that Americans have built to create the United States and what kinds of life these make possible, as, for example, the Jeffersonian agrarian democracy. This backdrop that we have built is not neutral, passive, but is infused with moral content that shapes who we are and how we live. Today ours is a decent country, but one with troubling features, particularly its waning support for values of equality, dignity and justice, and for traditional American concerns for the poor and the environment. Increasingly these values are displaced by the focus on production, consumption, and affluence. Moral malaise and indifference more and more mark U.S. society. The ground of contemporary culture must be so compacted and barren that a rich and grounded moral vision has a hard time taking root and gaining public support. The urgent moral task is to recognize this relationship, take responsibility for it and ask what kind of life expresses our deepest shared values. Borgmann hopes to widen the circle of well-being until it includes everyone in this country and on earth. Borgmann=s book is reviewed by Dan Spencer, What Consumes Us: The Deformation of American Values, Christian Century Vol. 124, no. 7 (April 3, 2007): 39-42.

creative relationship between the local and the global that will enable cities to remain the focus of social organization, political management and cultural expression. (v8,#2)


Borman, Margaret, "Can Governments Encourage a Reduced Fish Harvest to Allow Global Stocks to Regenerate Their Numbers," Journal of Environmental Law And Litigation 15(no.1, 2000): 127-. (v.12,#3)


Bormann, Bernard T., Richard W. Haynes, and Jon R. Martin. AAdaptive Management of Forest Ecosystems: Did Some Rubber Hit the Road?@ BioScience Vol. 57, no. 2 (2007): 186-91. Although many scientists recommend adaptive management for large forest tracts, there is little evidence that its use has been effective at this scale. One exception is the 10-million-hectare Northwest Forest Plan, which explicitly included adaptive management in its design. Evidence from 10 years of implementation of the plan suggests that formalizing adaptive steps and committing to monitoring worked better than allocating land to adaptive management areas. Clearly, some of the problems in implementing any new strategy should have been expected and probably would have been avoided if the plan had called for even more focused feedback. But decisions made after monitoring results were analyzed have led to new management priorities, including new approaches to adaptive management. These decisions suggest that one adaptive management loop has been completed. A continued commitment to learning about and adapting practices and institutions will most likely be needed to improve performance in the future.


Bormann, Herb), "On Respect for Nature," NRCC News, Northern Rockies Conservation Cooperative (P. O. Box 2705, Jackson, WY 83001), Autumn 2000, no. 13, pp. 4-5. "The biogeochemistry of the forest ecosystem changes with disturbances like cutting or fire and ... the forest ecosystem restores its regulation of biogeochemistry as it repairs itself through growth. The most astounding thing is that this great waxing and waning of the forest and its control over biogeochemistry occurs through the interaction of the abiotic environment with thousands of species of plants, animals and microbes and that it is repeatable. Not only is it repeatable through millennia of modest local, regional, and global disturbances, but ecosystems also have
the power of adjustment to new conditions, through evolution of component species and
migrations of new species.

The complexity of it all is overwhelming. ... Despite our growing knowledge of the natural
world, there is still a vast unknown component to the earth whose extent and effectiveness is
supported every day as this green planet sails through forbidding space. We should respect,
cherish and change with utmost caution this largely unknown natural world because it works as it
is and we are totally dependent on its working." Bormann is emeritus, Yale School of Forestry
and Environmental Studies, and celebrated for his designing of the small watershed technique for
measurement and analysis of forest ecosystems. (v.11,#4)

Bornett, H.L.I., Guy, J. H., and Cain, P. J., "Impact of animal welfare on costs and viability of
The European Union welfare standards for intensively kept pigs have steadily increased over
the past few years and are proposed to continue in the future. The aim of this study was to
determine the profitability of rearing pigs in a range of housing systems with different standards
for pig welfare. Models were constructed to calculate the cost of pig rearing (6-95 kg) in a
fully-slatted system (fulfilling minimum EU space requirements, Directive 91/630/EEC); a
partly-slatted system; a high-welfare, straw-based system (complying with the UK-based Royal
Society for the Prevention of Cruelty to Animals, Freedom Food standards) and a free-range
system. The results suggest that improved pig welfare can be achieved with a modest increase in
cost. KEY WORDS: economics, pig housing, pigmeat, welfare. (JAEE)

Borrelli, Peter, ed. Crossroads: Environmental Priorities for the Future. Washington, D.C.:
movement in the United States, organized around a series of articles in The Amicus Journal (the
magazine of the National Resources Defense Council); and a critical article by Barry Commoner,
argued that the environmental movement had not been successful in using the powers of
government to control pollution or solve other environmental problems. Commoner's criticism
led environmental activists to review the successes, the failures, and the outlook for
environmental action. This is not a scholarly book, but it is a useful treatment of policy issues in
the environmental movement. It contains a journalistic account of environmental philosophers
by Peter Borrelli, "The Ecophilosophers," pp. 69-83. (Katz, Bibl # 2)

Borstelmann, John, "Land Exchanges: Sound Management Tool or Invitation to Speculation?,"
Wild Earth 10(no.3, Fall 2000):63- . (EE v.12,#1)

Borthwick, Bruce, "Disappearing Act: Why is the Dead Sea Dying," Christian Century 120 (no.
3, February 8, 2003):20-21. The Sea of Galilee, the Jordan River, and the Dead Sea are all
threatened by increasing water withdrawals and increasing pollution, mostly by Israel but also by
Jordan. The Dead Sea has reached its lowest level on record, repeatedly falling lower than the
ever lowering "red lines," levels at which upstream water extraction should stop. The flow in
and from the Jordan River since the 1960's has dropped 90 percent, and what does flow is almost
sewage. In the 1850's, the mouth of the Jordan was 180 yards wide and three feet deep. Now it
is a few meters wide, more a creek than a river. Plant and wildlife in and around the lake, the
river, and the sea are adversely affected (the Dead Sea had no fish in it, but otherwise was not
"dead"). There is much Israel and Jordan could do co-operatively, and initiatives were once underway, but have stalled in the present tensions.


Bosque-Pérez, Nilsa A., Michael O'Rourke, J.D. Wulfhorst, David M. Althoff, Caren S. Goldberg, Merrill Kaylani, Wayde Morse, Max Nielsen-Pincus, Jennifer Stephens, Leigh Winowiecki, and Sanford D. Eigenbrode. A Employing Philosophical Dialogue in Collaborative Science. BioScience Vol. 57, no. 1 (2007): 55-64. Integrated research across disciplines is required to address many of the pressing environmental problems facing human societies. Often the integration involves disparate disciplines, including those in the biological sciences, and demands collaboration from problem formulation through hypothesis development, data analysis, interpretation, and application. Such projects raise conceptual and methodological challenges that are new to many researchers in the biological sciences and to their collaborators in other disciplines. In this article, we develop the theme that many of these challenges are fundamentally philosophical, a dimension that has been largely overlooked in the extensive literature on cross-disciplinary research and education. We present a Toolbox for philosophical dialogue, consisting of a set of questions for self-examination that cross-disciplinary collaborators can use to identify and address their philosophical disparities and commonalities. We provide a brief user=s manual for this toolbox and evidence for its effectiveness in promoting successful integration across disciplines.


Bosselman, Fred. "Four Land Ethics: Order, Reform, Responsibility, Opportunity." Environmental Law 24 (no. 4, 1994): 1439- . Aldo Leopold's hope that American thinking would converge toward a single land ethic is futile; instead Americans should accept that they have inherited four different land ethics, which are explained using King Arthur, David Ricardo, John Muir, and Scalia as prototypes.


Bostock, Stephen St. C., Zoos and Animal Rights: The Ethics of Keeping Animals. London: Routledge, 1993. 227 pages. , 35.00 cloth., 10.00 paper. Bostock unequivocally assigns rights to animals and rejects utilitarianism as a basis for animal protection. But such rights may be justifiably sacrificed if the benefits are compelling from a human-interest viewpoint. Zoo animals rights to well being prevents us from causing physical pain, death, or loss of freedom to them, and the first two are met in well-managed zoos. The third is a special challenge to zoos, but, in the end, "really good captivity is not, to all intents and purposes, captivity at all." Held
captive animals can be allowed essentially to continue their natural lives; such animals are captive only in a technical sense and free in a morally important sense. With endangered species, it is better for individuals of critically endangered species to live in artificial environments than not to be born at all. Bostock is the education officer for Glasgow Zoo. (v4,#3).


Bostrom, Magnus, "Environmental Organisations in New Forms of Political Participation: Ecological Modernisation and the Making of Voluntary Rules," Environmental Values 12(2003): 175-193. Environmental organisations have been active since the early 1960s in putting environmental issues on the political agenda and in strengthening the environmental consciousness of the public. The struggle has been successful in the sense that there is now a strong demand for practical solutions among all kinds of actors. It is, however, difficult for states and political actors to manage environmental problems by traditional forms and instruments, due to the complex character of the problems. Therefore, environmental organisations take their own initiatives to participate in policy-making by developing new forms, within new arenas, with the help of new instruments (voluntary rules or standards). Special attention is paid to the possibilities of identifying and developing constructive roles in relation to other actors and institutions as well as the capacity to organise standardisation projects and to mobilise and make use of power resources such as symbolic capital and knowledge. In order to interpret characteristics and implications (possibilities and limitations) of standardisation strategies, I draw on the ecological modernisation perspective. Empirically, I refer to the role of Swedish environmental organisations in standardisation projects such as eco-labelling. (EV)


Botchway, F. Nii, "Land Ownership and Responsibility for the Mining Environment in Ghana." Natural Resources Journal 38(No. 4, Fall, 1998):509-. (v10,#4)

computer-based systems. A multi-disciplinary approach to the study of the total biosphere. The first three authors are at the University of California, Santa Barbara. Orio is in the department of environmental science, University of Venice, Italy. (v1,#1)

Botkin, Daniel B., Our Natural History: The Lessons of Lewis and Clark. New York: Berkeley Publishing Group, A Perigee Book, 1995. 300 pages. What Lewis and Clark found in geography, fauna, flora, compared with what is there today, an environmental history, with prospects for the future. botkin is at the Center for the Study of the Environment, Santa Barbara, also with the Program for Global Change, George Mason University, Fairfax, VA. (v.9,#3)

Botkin, Daniel, B., "The Naturalness of Biological Invasions," Western North American Naturalist 61(no. 3, 2001):261-266. "A serious conundrum exists about invasive species: Biological invasions are natural and necessary for the persistence of life on Earth, but some of the worse threats to biological diversity are from biological invasions. ... If species never invaded new territories, they would be extinguished by catastrophic events in their previous habitats. ... One can either preserve a 'natural' condition, or one can preserve natural processes, but not both. The preservation of natural processes requires change. ... Either preserve the natural processes and therefore preserve life over the long run, or preserve a single condition and either threaten the persistence of life or else substitute a great amount of human intervention for natural, dynamic processes." Botkin is in ecology at the University of California, Santa Barbara. (v.12,#3)

Botkin, Daniel B. No Man's Garden: Thoreau and a New Vision for Civilization and Nature. Covelo, CA: Island Press, 2000. 288 pages. Cloth $24.95. Ecologist Daniel Botkin takes a new look at the life and writings of Thoreau to discover a model for reconciling the conflict between nature and civilization that lies at the heart of our environmental problems. He develops an account designed the assist in preserving the health of our biosphere that simultaneously allows for the further growth and development of civilization. (v.11,#4)


Botteron, Cynthia A., "India's 'Project Tiger' Reserves: The Interplay Between Ecological Knowledge and the Human Dimensions of Policymaking for Protected Habitats," Pages 136-
Botteron, Cynthia Ann, *What the Study of Tiger Preservation in India Reveals about Science, Advocacy, and Policy Change*, Ph.D. thesis, in political science, University of Texas-Austin, 2000. Investigates the legitimacy of the claim that imperialism was the motive and mode of transferring from one cultural context to another the "wilderness" version of "national parks" as a means of saving species and habitat, specifically with reference to tigers in India. The vast and powerful role played by the coalition of conservation scientists and international environmental organizations in creating and promoting this "ethic" has largely been ignored by policy theorists. These activities are here analyzed as is the impact on the development of science by its close association with environmental advocacy organizations. This "constructed" science was used to delegitimize alternative interpretations of the problem of species decline, habitat degradation, and the role and function of humans in the environment. The advisor was David Braybrooke. Botteron can be contacted at the Department of Political Science, Colorado State University, Fort Collins, CO 80523. E-mail: cynn@lamar.colostate.edu. (EE v.12,#1)


Samples from Vol. I:
* John P. Anton, "Aristotle and Theophrastus on Ecology"
* Warwick Fox, "Deep ecology and Virtue Ethics"
* Keekok Lee, "Aristotle: Towards an Environmental Philosophy"
* Theodore Tsolis, "Nature and Decay: Stoic Determinism and its Ecological Connotations"
* Laura Westra, "The Significance of Freedom and Limit in Aristotle's Notion of the Good and the New Earth Charter"
Samples from Vol. II:
* Sven Arntzen, "Is Presocratic Philosophy of Nature a Source of Man-nature Dualism?"
* G. Boger, "Aristotle on the Intention and Extension of Person and the Focal Concern of Environmental Philosophy"
* Konstantine Boudouris, "The Moral, Political and Metaphysical Causes of the Ecological Crisis"
* Warwick Fox, "Ethics and the Environment: Rethinking the Foundations of Value"
* Keekok Lee, "Anthropocentrism: Its Roots in Modern Western Philosophy and its Involvement with Modern Science/technology"
* Vitomir Mitevski, "Discovery of Harmony in Nature in Early Greek Philosophy"
* John O'Neill and Vernon Pratt, "Aristotelian Ethics and Post-Aristotelian Biology"
* Alexandar H. Zistakis, "Culture and Nature: How Culture Determines our Conception of Nature"

And many more. (Thanks to Sven Arntzen, Telemark College, Norway.) (v.12,#3)


Boudreaux, Donald J., Meiners, Roger E. and Zywicki, Todd J., "Talk is Cheap: The Existence Value Fallacy," Environmental Law 29 (No. 4, 1999): 765-. Environmental law and policy has increasingly recognized the concept of "existence value" - the "nonuse value" that individuals derive solely from the knowledge that an environmental amenity exists and not from its use. Because of its nonuse nature, existence value cannot be calculated through market transactions, but can be ascertained only through contingent valuation studies that purport to provide hypothetical valuations. This article questions the conceptual importance of existence value and the validity of contingent valuation as a means for deriving existence value. (v.11,#2)


Boulter, Michael, Extinction: Evolution and the End of Man. London: Fourth Estate, 2002. Nature is a self-organizing system. If the system is disrupted, nature will do what it must to restore balance, and one of its tools is extinction. The science of life, and the chilling effect that humans have had on the planet. The world will adapt and survive; humanity most probably will not. Boulter is in paleobiology at the University of East London, author of the text Basic Paleontology. (v.13,#4)

Boulting, Noel E., "The Aesthetics of Nature," Philosophy in the Contemporary World 6(no. 3-4, Fall-Winter, 1999):21-34. Three paradigms for aesthetic experience of nature: (1) Specularism, seeing nature as a picture, (2) Scientific Exemplarism, grasping aesthetic experience through the categories of scientific enquiry, and (3) Perspectivalism, a more phenomenological relation between the experienced and the experience. After the historical development which fashioned Specularism's approach to aesthetics has been indicated and the ahistorical nature of Scientific Exemplarism has been explained, the relative strengths of these three paradigms are explored. The implication of the third are related to a possible spiritual view of nature. Boulting lives in Upchurch, Nr. Sittingbourne, Kent, UK. (v.11,#2)

Bouma, Katherine, "Dam Removal Restores Cahaba River Marine Life," *Mobile (Alabama) Register*, November 22, 2004, p.5B. A dam, or something like a dam, a concrete plug with three foot culverts, and preventing fish travel upstream, has been removed from the Cahaba River, the (otherwise) longest free flowing river in Alabama. This permits the river regaining populations of fish, snails and other wildlife. The dam was once placed in the river by a coal company; when the Presbyterian Church bought the property it encouraged the removal, which required the efforts and funding of a number of agencies. (v.14, #4)

Bouma-Prediger, Steven, "Creation Care and Character: The Nature and Necessity of the Ecological Virtues," *Perspectives on Science and Christian Faith* 50 (no. 1, March 1998):6-21. Virtue theory is a neglected but significant area of research in ecological ethics. What exactly is a virtue? Are there particular virtues that arise from a biblically informed Christian ecological ethic? Are they merely nice to have or are they necessary? Certain virtues--like frugality, humility, and wisdom--are indispensable if Christians are responsibly to fulfill their calling to be earthkeepers. Certain character traits are central to creation care. Bouma-Prediger is in the Department of Religion, Hope College, Holland, MI. (v9,#2)


Bouma-Prediger, Steven, "Why Care for Creation?: From Prudence to Piety," *Christian Scholar's Review* 27(1998):277-297. "So why care for creation? For many reasons--many good reasons. Because our own existence is imperiled. Because we owe it to our children. Because an earth-friendly way of life is more joyful. Because various forms of oppression are of a piece. Because certain non-human creatures are entitled to our care. Because creation is valuable for its own sake. Because God says so. Because we are God's image-bearers. Because grace begets gratitude and gratitude care. Because, in sum, care for creation in integral to what it means to be a Christian--it is an important part of our piety, our spirituality, our collective way of being authentically Christian" (p. 296). (v9,#2)

Bouma-Prediger, Steven. *The Greening of Theology: The Ecological Models of Rosemary Radford Ruether, Joseph Sittler, and Jurgen Moltmann*. Atlanta: Scolars Press, 1996. 338pp. $35.95 cloth, $23.95 paper. Against the charge that the Christian tradition is ecologically bankrupt, the author demonstrates the intellectual and spiritual resources available within Christianity for addressing ecological issues. (v8,#2)


Bouvier, Leon F. and Lindsey Grant, *How Many Americans? Population, Immigration, and the Environment*. San Francisco: Sierra Club Books, 1995. 192 pages. $ 12.00. The population of the United States has tripled within this century, and our overconsumption of resources is a leading cause of many international environmental problems including acid rain and global warming. Stabilizing the size of the American population is crucial, for our own sakes amd the sake of the planet. Lowering immigration levels is necessary to achieve environmental sustainability. Bouvier is a demographer, former Vice-President of the Population Reference Bureau and an adjunct professor at Tulane University. (v8,#1)


Bowers, C. A., *Education, Cultural Myths, and the Ecological Crisis: Toward Deep Changes*. Albany, NY: State University of New York Press, 1993.  What our priorities should be in public school and university education as we face the environmental crisis. How our cultural beliefs contribute to the accelerating degradation of the environment as the most fundamental challenge we face. All other social and educational reforms must be assessed in terms of whether they mitigate or exacerbate the ecological crisis. Thought patterns formed in the past are reproduced through the metaphorical language used in the classroom, with the result that both conservative and liberal educators and their critics ignore the ecological crisis. Aldo Leopold, Wendell Berry, and Gregory Bateson suggest a more ecologically sustainable ideology. Bowers teaches education at Portland State University, Oregon. (v6,#2)

Bowers, C. A. "The Case against John Dewey as an Environmental and Eco-Justice Philosopher." *Environmental Ethics* 25(2003):25-42. Environmentally oriented philosophers and educational theorists are now attempting to clarify how the ideas of John Dewey can be used as the basis for changing cultural practices that contribute to the ecological crisis. Although Dewey can be interpreted as a nonanthropocentric thinker and his method of experimental inquiry can be used in eco-management projects, Dewey should not be regarded as an environmental and eco-justice philosopher and by extension, his followers should not be regarded in this light. (1) Dewey's emphasis on an experimental mode of inquiry did not take account of the knowledge systems of other cultures, particularly cultures that are more ecologically centered. (2) Dewey's understanding of language prevented him from recognizing how the root metaphors (meta-cognitive schemata) he took for granted were also the basis, with several exceptions, of the Industrial Revolution. (3) Dewey's failure to understand the complex nature of tradition, including the different ways in which intergenerational knowledge is shared and renewed, makes it difficult for his followers to address a central eco-justice issue which is to regenerate within diverse cultural communities the non-commodified forms of knowledge, skills, and relationships that enable individuals and communities to have a smaller ecological footprint. (EE)

Bowers, C. A. "The Conservative Misinterpretation of the Educational Ecological Crisis." *Environmental Ethics* 14(1992):101-27. Conservative educational critics (e.g., Allan Bloom, Mortimer Adler, and E. D. Hirsch, Jr.) have succeeded in framing the debate on the reform of education in a manner that ignores the questions that should be asked about how our most fundamental cultural assumptions are contributing to the ecological crisis. In this paper, I examine the deep cultural assumptions embedded in their reform proposals that further exacerbate the crisis, giving special attention to their view of rational empowerment, the progressive nature of change, and their anthropocentric view of the universe. I argue that their form of conservatism must be supplanted by the more biocentric conservatism of such thinkers
as Aldo Leopold, Wendell Berry, and Gary Snyder. Bowers is at the College of Education, University of Oregon, Eugene, OR. (EE)

Bowers, C. A., *The Culture of Denial: Why the Environmental Movement Needs a Strategy for Reforming Universities and Public Schools*. Albany, NY: State University of New York Press, 1997. The flaws in contemporary education. The complicity of the educational establishment in supporting the social and economic institutions that have produced the environmental crisis. Education from the primary grades through the universities needs to be totally reformed to support new, ecologically sustainable societies. Bowers formerly taught at the University of Oregon and at Portland State University. (v8,#3)


Bowles, Ian A., Rice, R. E., Mittermeier, R. A., and da Foneca, G.A.B., "Logging and Tropical Forest Conservation," Science 280(1998):1899-1900. Environmental and development organizations have poured hundreds of millions of dollars into sustainable forestry, but these investments have produced few results. Outside plantations, less than 0.02 percent of the world's tropical forests are managed sustainably for timber. The major barrier to sustainable forestry's success is basic economics. Reaping a one-time harvest of ancient trees today is simply more profitable than managing for future harvests. The World Bank is the largest funder of forestry projects worldwide. In the face of a World Bank initiative to establish 500 million acres of sustainable forestry by 2005, scientific evidence is mounting that sustainable harvests may damage biodiversity more than standard logging practices. Summary and further details in Tanglely, Laura, "Sustainable Logging Proves Unsupportable," U.S. News and World Report, June 29, 1998, pp. 63-64. (v9,#2)


Bowman, M. B., "Legal Perspectives on Dam Removal," Bioscience 52(no.8, 2002): 739-42. (v.13,#4)


Bowman, Michael, "The Nature, Development and Philosophical Foundations of the Biodiversity Concept in International Law," in Michael Bowman and Catherine Redgwell. eds.,


Americas® by Herman Rosa, Deborah Barry, Susan Kandel, and Leopoldo Dimas, (10)
ACertification Systems as Tools for Natural Asset Building® by Michael E. Conroy, (11)
AWastes as Assets: Limits and Potentials® by Eugenio M. Gonzalez, (12)
ACommunity Rights and Wildlife Stewardship: Zimbabwe®s CAMPFIRE Program® by James C. Murombedzi, (13)
AInternational Environmental Justice: Building the Natural Assets of the World®s Poor® by Krista Harper and S. Ravi Rajan, (14)
AEnvironmental Justice: Reflections from the United States® by Manuel Pastor, (15)
AEquitable Carbon Revenue Distribution Under an International Emissions Trading Regime® by Nathan E. Hultman and Daniel M. Kammen, and (16)
AGreenhouse Justice: An Entitlement Framework for Managing the Global Atmospheric Commons® by Sunita Narain and Matthew Riddle.


Boyd, Freeman, "Humane Slaughter of Poultry: The Case Against the Use of Electrical Stunning Devices", Journal of Agricultural and Environmental Ethics 7(1994):221-236. Is the use of electrical stunners adequately discharging our moral obligations with respect to the humane slaughter of poultry? Thee separate lines of investigation show that we cannot give an unequivocal answer to this question. Five potentially humane methods of poultry slaughter are examined. Electrical stunning is found to be an acceptable method of rendering birds unconscious before slaughter. We lack sufficient evidence to claim that it is the most humane method currently available and that a proper stun is always achieved. Controversy surrounding the increased current flow and the impact of electrocution on carcass quality and operator safety will continue to cause resistance to the adoption of this method of poultry slaughter. The conclusion offers four recommendations that follow from the cumulative results of these investigations. Boyd lives in Meaford, Ontario.


Boyd, James, "What's Nature Worth? Using Indicators to Open the Black Box of Ecological Evaluation," Resources (Resources for the Future), Summer, 2004, Issue no. 154, pages 18-22. The value of nature is inherently complex; rarely is there a clear-cut, "right" answer to a question like which ecosystem is the most valuable. A central problem is that complex answers, including economic and ecological measures, are difficult to convey to the public. But unless they are clearly conveyed, the public is not convinced by scientists and economists. One line of solution is to use "indicators." Boyd is with Resources for the Future. (v. 15, # 3)

Boyd, W; Prudham, WS; Schurman, RA, "Industrial Dynamics and the Problem of Nature," Society and Natural Resources 14(no. 7, 2001):555-570. (v.13,#1)

Boykoff, Maxwell T. AFrom convergence to contention: United States mass media representations of anthropogenic climate change science.@ Transactions of the Institute of British Geographers Vol. 32, no. 4 (2007): 477-89. This article focuses on connected factors that contribute to US media reporting on anthropogenic climate change science. It analyzes US newspapers and television shows from 1995 to 2006 as well as semi-structured interviews with climate scientists and environmental journalists. Through analyses of power and scale, the paper brings together issues of framing in journalism to questions of certainty/uncertainty in climate science. The paper examines how and why US media have represented conflict and contentions, despite an emergent consensus view regarding anthropogenic climate science.

Boylan, Michael, ed., Environmental Ethics. Upper Saddle River, NJ: Prentice-Hall, 2001. Sections on Worldview and Applied Ethics; Land Ethic, Deep Ecology, and Social Ecology; Ecofeminism; Religion and Aesthetics; Moral Basis for Environmentalism; Anthropocentric Justifications, Biocentric Justifications; Searching the Middle (between these two); Animal Rights; Biodiversity; Sustainable Development. Features (a) an original interview with a prominent person who faces the practical challenges of ethical issues in the environment daily, (b) a methodology for linking theory to action, (c) an awareness of gender issues, and (d) a method for students to follow to write an essay using the information presented. Boylan is philosophy at Marymount University, Arlington, VA. (v.12,#4)


Boyle, David, "Wall Street 2," The Ecologist 30(no. 9, Dec. 1, 2000):26- . The world economy today is worryingly similar to that of 1929?just before the catastrophic Wall Street Crash. Could it all happen again? (v.12,#2)

Boyle, T. C., A Friend of the Earth. New York: Viking, 2000. An eco-novel, portraying a future dystopia in which all the efforts of environmentalists accomplish nothing and the world succumbs to global warming. At the conclusion, the lead couple, broken and old, head for the blasted mountain forest to rebuild the wrecked house in which they had once lived. They watch the woods begin to come back, "the shoots of the new trees rising up out of the graveyard of the old, aspens shaking out their leaves with a sound like applause, willows thick along the streambeds." (v.11,#4)


Bracke, M. B. M., K. H. De Greef and H. Hopster, "Qualitative Stakeholder Analysis for the Development of Sustainable Monitoring Systems for Farm Animal Welfare," *Journal of Agricultural and Environmental Ethics* 18(2005):27-56. Evaluating animal welfare in the animal-product market chain is a key challenge to further improve the welfare of farm animals and information on the welfare of animals must, therefore, be assessed objectively, for instance, through monitoring. Interviews with Dutch stakeholder representatives were conducted to identify their perceptions about the monitoring of animal welfare. While producers tend to perceive welfare from a production point of view, consumers use visual images derived from traditional farming and from the animals natural environments. Scientists perceptions of animal welfare are affected by the need to measure welfare with quantifiable parameters. Retailers and governments (policy makers) have views of welfare that are derived from their relationships with producers, consumers, non-governmental organizations (NGOs), and scientists. All interviewed stakeholder representatives stated that animal welfare is important. Keywords animal welfare assessment - housing and management systems - monitoring - on-farm - stakeholder analysis. The authors are in animal science, Wageningen University and Research Centre, Lelystad, The Netherlands. (JAE)
procedure needs to be refined, but its prospects are promising. Keywords: animal welfare assessment, decision support system, pigs. The authors are at the at the DLO-Institute of Agricultural and Environmental Engineering Wageningen, The Netherlands. (JAEE)

Bracke, M. B. M., and H. Hopster, "Assessing the Importance of Natural Behavior for Animal Welfare," Journal of Agricultural and Environmental Ethics 19(2006):77-89. The concept of natural behavior is a key element in current Dutch policy-making on animal welfare. It emphasizes that animals need positive experiences, in addition to minimized suffering. This paper interprets the concept of natural behavior in the context of the scientific framework for welfare assessment. Natural behavior may be defined as behavior that animals have a tendency to exhibit under natural conditions, because these behaviors are pleasurable and promote biological functioning. Animal welfare is the quality of life as perceived by the animal. Animals have evolved cognitive-emotional systems ("welfare needs") to deal with a variable environment. Animals do not only have so-called physiological needs such as the need for food, water, and thermal comfort. They also need to exercise certain natural behaviors such as rooting or nest-building in pigs, and scratching or dust-bathing in poultry. All needs must be taken into account in order to assess overall welfare. The degree of need satisfaction and frustration can be assessed from scientific information about the intensity, duration, and incidence of (welfare) performance criteria such as measurements of behavior and/or (patho)physiology. Positive welfare value relates to how animals are inclined to behave under natural conditions, in preference tests, and in consumer-demand studies. Negative welfare value relates to stress, frustration, abnormal behavior, aggression, and reduced fitness. Examples are given to illustrate how the need to perform natural behaviors can be assessed following the general principles for welfare assessment, providing a first approximation of how different natural behaviors affect animal welfare. Keywords: Animal welfare - assessment methodology - model - natural behavior. The authors are with the Animal Sciences Group, Division Animal Resources Development, Wageningen University and Research Centre, Lelystad, The Netherlands. (JAEE)


Braden, Kathleen. "On Saving the Wilderness: Why Christian Stewardship is Not Sufficient," Christian Scholars Review 28(No.2. 1998):254-269. The relationship between humanity and the earth is considered through three phases: the wild earth, the tamed earth, and the tended earth, as grounded in arguments for an either biblically based dominion or a stewardship worldview. Braden suggests that stewardship alone is an insufficient ethic for preserving wilderness areas and wildlife because it calls for management of that which is inherently unmanageable by humans. Instead, a loving restraint of human action based on Matthew is demanded. (v.11,#2)

dying in Russia.... At this moment of greatest need, the network of Russian nature reserves that saves pockets of Eurasia's threatened species has fallen on hard times. Many reserves exist on paper only; most are under siege, and all are severely understaffed. Braden is in geography at Seattle Pacific University.

Bradford, George. How Deep is Deep Ecology? With an Essay-Review on Woman's Freedom. Ojai, CA: Times Change Press, 1989. P. ix, 84. This is an expanded version of an article originally appearing in the magazine Fifth Estate. It reviews the deep ecological philosophy of Arne Naess, George Sessions, and Bill Devall, and the practical program of Earth First! from the perspective of an anarchist social critique. Deep ecologists overlook the "interlocking, armored juggernaut" of "capital, technology, and the state" which is the real cause of environmental problems (p. 50). "Deep ecologists err when they see the pathological operationalism of industrial civilization as a species-generated problem rather than as one generated by social phenomena that must be studied in their own right" (p. 10). It is true that deep ecologists must put their arguments into a broader context of social philosophy and philosophy of technology; but this social criticism of deep ecology fails to understand the true structure of environmental problems: the separation of humanity from nature because of narrow anthropocentric thinking. (Katz, Bibl # 2)


Bradley, Ben, "The Value of Endangered Species," Journal of Value Inquiry 35(2001):43-58. There are three prevailing accounts of justifications for saving endangered species: (1) Robert Elliot argues that the last members of a species have greater intrinsic value. (2) Holmes Rolston, III, Alastair Gunn, and Nicholas Rescher argue that species themselves have intrinsic value. (3) Robin Attfield argues that eliminating a species has negative instrumental value. But
all these attempted justifications are inadequate. Philosophers have failed to realize that intrinsic and instrumental value are not the only types of value at issue. If we recognize the existence of contributory value, along with Brentano's principle of bonum variationis, we may be able to defend a preservationist account of endangered species. Bradley is in philosophy, Virginia Polytechnic Institute and State University. (v.13, #3)

Bradley, Ian, God Is Green: Ecology for Christians. New York: Doubleday Image Books, 1990. 118 pages. Paper. $ 8.00. Chapter titles: God's concern for all creation: "The earth is the Lord's and the fullness thereof." The dance of creation: "The trees of the field shall clap their hands." The fall of nature: "The whole creation has been groaning in travail." The cosmic Christ: "Who is this that even the winds and sea obey him?" The role of human beings: "Thou hast given him dominion over the works of thy hands." An analysis of the biblical understanding of the goodness of creation and of human stewardship, suitable for use in churches. A sacred world is at the heart of Christian belief. Of all the world religions, Christianity has the greatest claim to be environmentalist because it professes that God is incarnate in the very stuff of nature. With practical suggestions for greening the churches. Bradley is a minister in the Church of Scotland and a member of the Green Party. (v5,#2)

Bradley, Ian, "How Green was Celtic Christianity?" Ecotheology No 4 (Jan 1998):58-69.

Bradley, Nina Leopold, "A Man For All Seasons," National Wildlife 36(no. 3, April/May, 1998):30-34. Leopold died fifty years ago, on April 21, 1948 (the anniversary falling on day before 1998 Earth Day). His daughter shares some memories of her father, among others his concern, curiosity, and the importance of keeping records. All five of Leopold's children became scientists, and Nina Leopold Bradley has spent the last two decades conducting ecological research at the 1,500 acre Leopold Memorial Reserve in Wisconsin. (v9,#1)

Bradley, Nina Leopold, "Aldo Leopold: On the Path Toward Unity of Knowledge" Wild Earth 9(no. 3, Fall 1999):11- . (v10,#4)

Bradley, Raymond and Stephen Duguid, eds., Environmental Ethics, vol. II. Simon Fraser University, Institute for the Humanities, Burnaby, BC V5A 1S6, Canada. 1989. 215 pages. $ 12 Canadian. An anthology, the perspectives are varied, including the university, business, and government sectors, scientists, ecologists, philosophers, policy analysts and policy critics. (v1,#4)


Bradley, Theresa. Fiscal Restructuring Programs: The Environmental Factor. Washington, D.C.: World Resource Institute, 1997. 50pp. $14.95 paper. Concrete examples of how fiscal structures--taxes, public sector pricing, and subsidies--can be revised to generate environmental benefits, economic efficiencies, and government revenues simultaneously. In-depth case studies of Poland, India, and Mexico demonstrate the potential power of these reforms. (v8,#1)
Bradshaw, G. A., and Bekoff, Marc, "Integrating humans and nature: Reconciling the boundaries of science and society," TREE 15(no. 8, August, 2000):309-310. After many decades of separation, environmental and ecological sciences have formally undertaken an effort to reintegrate humans back into nature. Recent concern with the "human dimension" represents a significant departure from historic traditions where the human-nature boundary has formed the division between the natural and the social sciences. Now the interrelationships and interdependence between humans and nature constitute the primary drivers of much ecological research. Bradshaw is at the National Center for Ecological Analysis and Synthesis, Santa Barbara, CA. Bekoff is in biology, University of Colorado, Boulder.  


Bradstock, Ross A., Williams, Jann E., and Gill, A. Malcolm, eds., Flammable Australia: The Fire Regimes and Biodiversity of a Continent. Cambridge: Cambridge University Press, 2001. Fire is pivotal to the functioning of Australian ecosystems and affects the distribution and abundance of the continent's unique and highly diverse range of plants and animals. Conservation of this biodiversity requires an understanding of the action of fire on the landscape. Natural fire has waxed and waned over geological times on Australian landscapes, mostly associated with climatic changes, and going back into the Tertiary period and before (over 1 million years). "There is a notable increase in fire activity centered on 40 ka before present (BP) [40,000 years ago] which, in the absence of a major climate change in around this time, is considered to mostly likely indicate early Aboriginal burning. The impact on the vegetation was largely to accelerate existing trends rather than to cause a wholesale landscape change. It is difficult to separate the effects of climate change and human-induced burning subsequent to this time until the arrival of Europeans" (p.3). Bradstock is with the Biodiversity Research Group of the New South Wales Parks and Wildlife Service, Australia.  

Brady, Bernard and Mark Neuzil, A Spiritual Field Guide: Meditations for the Outdoors. Grand Rapids, MI: Brazos Press, 2004  A field guide for people of faith who want to be more deeply in touch with God's good Earth and to attend to God's voice in nature. One needs to "pay attention" in and to nature. The outdoors can awaken sensibilities of dependence, gratitude, responsibility, hope, and purpose.


appreciation is typically understood in terms of valuing nature as an amenity, something that we value for the pleasure it provides. In this paper I argue that this position, what I call the hedonistic model, rests on a misunderstanding of aesthetic appreciation. To support this claim I put forward an alternative model based on disinterestedness, and I defend disinterestedness against mistaken interpretations of it. Properly understood, disinterestedness defines a standpoint which precludes self-interest and utility, and it does not entail a passive subject abstracted from who they are. This standpoint is compatible with a ‘situated aesthetic’ in which appreciation of aesthetic qualities is grounded in an embedded subject who is sensitive to the context and narrative of the object. The alternative model provides a conception of aesthetic value which distinguishes it from amenity value, and it also defines a non-instrumental approach that offers the opportunity for enhanced appreciation and attention to nature's value. KEYWORDS: Disinterestedness, aesthetic value, environmental aesthetics, natural beauty. Emily Brady is at Lancaster University, UK. (EV)

Brady, Emily, "Aesthetics in Practice: Valuing the Natural World," Environmental Values 15(2006): 277-291. Aesthetic value, often viewed as subjective and even trivial compared to other environmental values, is commonly given low priority in policy debates. In this paper I argue that the seriousness and importance of aesthetic value cannot be denied when we recognise the ways that aesthetic experience is already embedded in a range of human practices. The first area of human practice considered involves the complex relationship between aesthetic experience and the development of an ethical attitude towards the environment. I then discuss how aesthetics has played a role in scientific study and the use of evaluative aesthetic concepts in science, such as variety and diversity. The final section shows the connection between the beneficial effects of aesthetic engagement with nature and the restorative value of nature for human well-being. (EV)


Brady, Emily. "Aesthetic Character and Aesthetic Integrity in Environmental Conservation." Aesthetics plays an important role in environmental conservation. In this paper, I pin down two key concepts for understanding this role, aesthetic character and aesthetic integrity. Aesthetic character describes the particularity of an environment based on its aesthetic and nonaesthetic qualities. In the first part, I give an account of aesthetic character through a discussion of its subjective and objective bases, and I argue for an awareness of the dynamic nature of this character. In the second part, I consider aesthetic character in a conservation context. I develop the diachronic concept of aesthetic integrity to guide decisions about how to manage change to aesthetic character. My argument is illustrated with a case study of the proposal for a superquarry on the remote isle of Harris in Scotland. Environmental Ethics 24(2002):75-91. (EE)


Braks, Andrew David, *Aristotle's Primary Substance: The Bio-Platonic Motivations Behind Metaphysics Z and H*. Colorado State University, Philosophy M.A. thesis, fall 1997. Aristotle stood in the legacy of Plato, but had much more interest in biology. His thought developed and for him, in the *Metaphysics*, primary substances are species forms. They define concrete individual substances, although in Aristotle's earlier thought in the *Categories* substances are primarily individuals. But Aristotle is unable to entertain ideas similar to modern evolutionary ideas. His biological species-forms are essentially unchanging and perpetually instantiated by a never-failing succession of living individuals. (v.8,#4)

Brams, Steven J., and Taylor, Alan D. *Fair Division: From Cake-Cutting to Dispute Resolution*. New York: Cambridge University Press. 1996. Mathematics and algorithms for conflict resolution, such that all parties are maximally satisfied. With two persons, it is easy. Cutting a cake, you cut, I choose. With three persons and more variables, it is harder. With multiple parties and many variables, there are still procedures. All parties list in secret all the disputed items and rank order them. A mediator can use a procedure called "adjusted winner," and Brams and Taylor demonstrate mathematically that any allocation resulting will be both maximally equitable and what they call "envy free," that is, disputants will be maximally satisfied that they got the best outcome they could under the circumstances. The procedure has been used in divorce settlements, in business disputes, and retrospectively on the 1978 Camp David agreement between Egypt and Israel. A major difficulty is that scheming parties can anticipate the other parties' rankings and skew the results. There are many possibilities for the resolution of environmental disputes. Brams is in political science at New York University. Taylor is a mathematician at Union College, Schenectady, NY.


Bramwell, Anna, *The Fading of the Greens: The Decline of Environmental Politics in the West*. New Haven: Yale University Press, 1994. 216 pages. $ 25. Greens have had a major political impact, but they do not win any elections. How green consciousness became skewed in political practice, preventing the greens from attracting the support they needed, largely due to the dominance of the German greens and their atypical characteristics. The green frontier now lies with international organizations, not political parties. Bramwell administers environmental
strategy in eastern Europe for the Organization for Economic Co-operation and Development, Paris. (v5,#3)

Bramwell, Anna. *Ecology in the 20th Century* (New Haven: Yale University Press, 1989). An intellectual and political history of the ecology movement in the twentieth century. The first thorough study of the origins and background of the "green" politics that has in recent years carved out a significant political constituency. Ecologism is a political category in its own right. (v1,#1)

Branch, Michael P., and Philippon, Daniel J., eds. *The Height of Our Mountains: Nature Writing from Virginia's Blue Ridge Mountains and Shenandoah Valley*. Baltimore, MD: Johns Hopkins University Press, 1998. Seventy writers beginning in 1607 and ending with contemporary writers such as Annie Dillard, Roger Tory Peterson and Edwin Way Teale. (v9,#1)


Brandenburg, Andrea M., Carroll, Matthew S. "Your Place or Mine?: The Effect of Place Creation on Environmental Values and Landscape Meanings," *Society & Natural Resources* 8(no.5 Sept. 1995):381-. (v6,#4)


Brandt, Anthony, "Not in my Backyard," *Audubon* 99(no. 5, Sept.-Oct. 1997):58-62, 86-87, 102-103. The suburbanization of wildlife. Wildlife is rapidly encroaching on America's suburbs, and vice versa. How are we to tolerate the hometown proliferation of predators and prey? This includes not only deer and birds, but bears and cougars. Animals can become inconvenient. The real test comes when wildlife affects you and your property. Brandt lives on Long Island and has watched the deer populations become larger and more troublesome. (v8,#3)


Brandt, Richard, "Soviet Environment Slips Down the Agenda," *Science*, January 3, 1992. Environmentalism is strong in the new republics, but most people are more worried about sausages than pollution. The former Soviet Republic contains some of the worst environmental disasters known on Earth (as well as some of the most pristine regions remaining. People are muting their conservation concerns and protests against pollution and environmental degradation to give economic reform a chance. An October conference involving U. S. and Soviet scientists
Branigin, William, "Immigration Policy Dispute Rocks Sierra Club," Washington Post (3/7/98): A2. Immigration's effect on U.S. population provokes Sierra Club debate. The official Sierra Club policy is to take no position on U.S. immigration levels. This has caused a faction in the Club to launch a referendum attempting to force club leadership to adopt a policy calling for ending U.S. population growth by means of birth control and a reduction in net immigration. Club director Carl Pope believes that although "overpopulation is, without question, a fundamental cause of the world's ills," he also believes that "these are fundamentally global problems; immigration is merely a local symptom." Furthermore, Pope argues that adopting such a policy would lead to the perception that the Club is assisting people with racist motivations. Supporters of the position favoring immigration reduction included Lester Brown and E.O. Wilson. One activist claims the issue is "a question of being environmentally correct versus being politically correct." U.S. population now stands at 269 million, and legal and illegal immigration add about 1.2 million people a year. When U.S.-born children of recent immigrants are included in the equation, immigration accounts for more than half of today's population growth. Mainly because of high fertility rates of immigrant women, the Census Bureau has sharply revised its projections of U.S. population by the middle of the next century. Instead of leveling off at 300 million, the estimate is now that the population will reach 400 million by 2050 and keep growing. Immigration-control activists assert that this estimate is too low because it is based on levels of immigration significantly lower than current numbers. They believe that 500 million is a more likely projection. The immigration reduction referendum was defeated by Club membership. (v9,#2)


Brashares, Justin et al, "Bushmeat Hunting, Wildlife Declines, and Fish Supply in West Africa," Science 306 (12 November 2004):1180-1198. Bushmeat hunting is a multi-billion dollar trade in the tropics. In Ghana, the bushmeat trade is now greatly increased due to the shortage of fish, a dietary staple in the region. The fish are in short supply for local peoples due to increased commercial fishing, much of it illegal pirate fishing. Brashares in the Conservation Biology Group, Department of Zoology, Cambridge University. (v.14, #4)


Bratton, Susan Power, and Hinz, Shawn, "Ethical responses to commercial fisheries decline in the republic of Ireland," Ethics and the Environment 7(no. 1, 2002):54-91. An open-ended questionnaire elicited concepts of virtue and duty, and ethical language and priorities from commercial fishers and residents of ports in the Republic of Ireland. Respondents came from viable and stressed fisheries and from nontraditional and traditional natural resources communities (including one in Gaeltacht). In reporting the characteristics of a "good" fisher, viable fisheries emphasized virtues such as work ethic, respect for the crew, and respect for the
The responses from stressed fisheries materialized virtue, and decreased emphasis on interpersonal relationships while increasing emphasis on owning a large vessel, investing, and being greedy. Most noble actions primarily concerned rescues and sharing equipment and time in difficult circumstances. Worst actions concerned physical damage to gear, persons, or to the marine environment. Respondents personified the sea, and used similar vocabulary to express care for people and for marine organisms. Although respondents from all communities thought over-fishing and illegal fishing were threats to the fishery, respondents from viable fisheries were more likely to believe they could take personal conservation action to protect the fishery, while those from stressed fisheries despaired of personal protective action and believed that nothing could be done, or that excluding the foreign fleets was necessary for Irish fisheries to recover.

European Community policies often conflict with the norms of traditional, artisanal fishers.

Bratton, Susan Power. "The Original Desert Solitaire: Early Christian Monasticism and Wilderness." Environmental Ethics 10(1988):31-53. Roderick Nash's conclusion in Wilderness and the American Mind that St. Francis "stood alone in a posture of humility and respect before the natural world" is not supported by thorough analysis of monastic literature. Rather St. Francis stands at the end of a thousand-year monastic tradition. Investigation of the "histories" and sayings of the desert fathers produces frequent references to the environment, particularly to wildlife. In stories about lions, wolves, antelopes, and other animals, the monks sometimes exercise spiritual powers over the animals, but frequently the relationship is reciprocal: the monks provide for the animals and the animals provide for the monks. This literature personifies wild animals and portrays them as possessing Christian virtues. The desert monk is portrayed as the "new Adam" living at peace with creation. Some of the literature is anti-urban, with the city treated as a place of sin, the desert a place of purification. The wilderness functions much as a monk's cell, providing freedom from worldly concerns and a solitary place for prayer and contemplation. The monks' relationship to the desert is evidence of their spiritual progress. (EE)

Interesting review of the historical sources and stories of the early Christian fathers and their relationship to wilderness as a place of spiritual enlightenment. (Katz, Bibl # 2) Bratton is at the Institute of Ecology, University of Georgia, Athens, GA.

Bratton, Susan Power, "Thinking Like a Mackerel: Rachel Carson's Under the Sea-Wind as a Source for a Trans-ecotonal Sea Ethic," Ethics and the Environment 9(no. 1, 2004):1-22. In contrast to "the land ethic," Rachel Carson's Under the Sea-Wind suggests a trans-ecotonal sea ethic, which understands human's perception as inhibited by ecotones, such as shorelines and the ocean surface, and suggests four foundational concepts: 1.) Humans are not fully adapted to life in the oceans. 2.) Humans need to understand the scale and complexity of ocean ecosystems. 3.) Humans disrupt ocean ecosystems by overharvesting their productivity, and modifying ecosystem processes and linkages, such as migrations. 4.) Human imagination and rational scientific investigation can traverse the ecotones, allowing us to more fully value ocean life and processes. Bratton is in environmental studies, Baylor University, Waco, TX. (E&E)

Bratton, Susan Power. "Loving Nature: Eros or Agape?" Environmental Ethics 14(1992):3-25. Christian ethics are usually based on a theology of love. In the case of Christian relationships to nature, Christian environmental writers have either suggested eros as a primary source for
Christian love, without dealing with traditional Christian arguments against eros, or have assumed agape (spiritual love or sacrificial love) is the appropriate mode, without defining how agape should function in human relationships with the nonhuman portion of the universe. I demonstrate that God's love for nature has the same form and characteristics as God's love for human beings, and that because agape is self-giving, it is preferable to eros in relationships with the environment. Agape concerning nature (1) is spontaneous and unmotivated, (2) is indifferent to value, (3) creates value, (4) initiates relationships with the divine, (5) recognizes individuality, (6) provides freedom, and (7) produces action and suffering. Agape might best be defined, not as Platonic ascent above the world, but as completely self-giving engagement with the world. Human love for nature is often limited by a human inability to accept love, including divine love, from nature. Flowing from God, agape cannot require reciprocity; yet, agape understands what "the other" has to give and can offer it complete valuation. Agape is the ideal form of human interaction with nature, because agape does not require equal status or ability, or common goals or needs. Love between humans and members of the land (or sea) community can be sacrificial, and should be distinguished by a loss of self-regard and a willingness to suffer. Further philosophical and theological discussion of the role of reciprocity and sacrifice in love for nature is highly desirable. Bratton is in the department of Natural Sciences, Messiah College, Grantham, PA. (EE)


Bratton, Susan Power. "The Ecotheology of James Watt." *Environmental Ethics* 5(1983):225-36. The popular press has claimed that (former) Secretary of the Interior James Watt bases his philosophy of environmental management on his religious views as a charismatic Christian. An examination of Watt's published statements indicates: (1) his philosophy of environmental management stems largely from economic and political considerations; (2) he has a relatively simple ecotheology based on concepts such as God providing creation as a blessing for mankind, and mankind having a stewardship responsibility to use resources to provide for people; (3) his ecotheology does not incorporate any characteristically charismatic ideas; and (4) his ecotheology does not strongly parallel that of conservative Christian theologians who have written on environmental issues. This analysis suggests that for the new "Christian politic" as a whole, there is a danger of confusing the scriptural with the cultural and political in the area of environmental ethics. If a Christian ecotheology is going to be used for environmental decision making, it should be developed fully and represent scripture accurately and completely. Bratton is at the Institute of Ecology, University of Georgia, Athens, GA. (EE)

Bratton, Susan Power. "National Park Management and Values." *Environmental Ethics* 7(1985):117-33. Throughout the history of the U.S. national park system, park advocates and managers have changed both acquisition priorities and internal management policies. The park movement began with the establishment of large, spectacular natural areas, primarily in the West. As the movement developed there was more emphasis on the biological, on recreation, and on parks near population centers. Gradually, scenic wonders and uniqueness have become less necessary to designation and the types of sites eligible have diversified. Early managers treated the parks as relatively unchanging, threatened by little other than human vandalism. Initially managers removed "bad" animals, such as wolves, and suppressed disturbances, such as fire. Modern management values processes as well as objects and recognizes change and disturbance as integral to park maintenance. A conversion to an ecosystem mode of management does not answer all questions concerning values, however, and may present some disadvantages, such as a tendency to treat nature as a series of functions and energy equations, thus weakening aesthetic values. Bratton is at the Institute of Ecology, University of Georgia, Athens, GA. (EE)

Bratton, Susan Power. "Lopsided Justice and Eco-Realities for Women." *CTNS (Center for Theology and Natural Science) Bulletin* 16, no. 2 (Spring 1996): 18-27. Women's overall low status in the public sphere has limited their environmental representation. Environmental strategies must improve women's ability to participate in political and economic decision-making. We need some careful thinking by both women and men concerning ways in which we can develop more woman-inclusive environmental strategies. Bratton teaches in science, technology, and culture at Whitworth College, Spokane, Washington. (v7, #3)

Bratton, Susan Power. "Christian Ecotheology and the Old Testament." *Environmental Ethics* 6(1984):195-209. Because of its theocentric nature and the dispersion of relevant passages, the Old Testament presentation of creation theology is frequently misunderstood. I investigate the works of modern Old Testament scholars, particularly Walther Eichrodt, Gerhard von Rad, and Claus Westermann, in regard to the theology of creation. Using principles of analysis suggested by Gerhard Hasel, I discuss how the Old Testament portrays God as acting in both the original creation and post-Genesis events. The role of God as creator is not independent of other major Old Testament themes, such as God the savior. God's care for creation continues as does his blessing. Bratton is at the Institute of Ecology, University of Georgia, Athens, GA. (EE)


Bratton, Susan Power. *Environmental Values in Christian Art*. Albany: State University of New York Press, 2008. In environmental studies, a common claim is that Christianity brought a transcendent God outside of nature and a hostility to nature. Bratton claims, to the contrary, that nature is included in the vision of Christian redemption. She examines Christian art and architecture from early third-century Rome to seventeenth-century Netherlands for the role nonhumans play in this art and how Christian art represents the ownership and management of natural resources. Bratton is in environmental studies at Baylor University.


-Keil, Roger, and Graham, John, "Reasserting nature: Constructing urban environments after Fordism."
-McCarthy, James, "Environmentalism, wise use and the nature of accumulation in the rural West."
-Demeritt, David, "Science, social constructivism and nature."
-Smith, Neil, "Nature at the millennium: Production and re-enchantment." (v.13,#4)
Braun, Elisabeth. *Portraits in Conservation: Eastern and Southern Africa*. Ojai, California: The WILD Foundation, Nov. 1995. $28. Studies of individual men and women who have dedicated themselves to conservation in Africa. Leading conservationists such as the Krauses, who began the Cheetah Conservation Fund in Namibia, or Michael Werikhe, who has mobilized a grassroots movement to save the rhino from poachers. Descriptions of village-based projects and the individuals involved in them reveal an evolving conservation philosophy. (v7,#4)


Bray, DB; Sanchez, JLP; Murphy, EC, "Social Dimensions of Organic Coffee Production in Mexico: Lessons for Eco-Labeling Initiatives," *Society and Natural Resources* 15(no.5, 2002):429-446. (v.13, #3)


Brechin, Steven R. *Planting Trees in the Developing World*. Baltimore, Maryland: The Johns Hopkins University Press, 1997. 280pp. $48.50. Brechin draws upon organizational sociology to explain why three international organizations--the World Bank, the Forestry Department of the Food and Agriculture Organizations, and CARE, USA--perform so differently while promoting rural development forestry projects in Africa, Asia, and Latin America. (v8,#1)


Breed, Allen, "Blocking of waterways prompts ownership debate," The Charleston Post and Courier (5/31/98): B7. Who owns the waterways? With millions turning to nature for recreation and as developers move deeper into the woods to build second homes, conflicts between private property rights and river access and use are increasing. In Arkansas, a farmer has strung barbed wire across a creek known for its excellent smallmouth-bass fishery. In Colorado, a landowner's plan to build a low bridge across the Taylor river seems an attempt to force travelers to trespass on shore. A New York State Court of Appeals has ruled that a private landowner holds the exclusive fishery rights on the Salmon River near Syracuse, even though the fish were stocked by the state. Laws vary from state to state and may depend on the stream. In some states, you can float a "privately owned" stream but trespass if you push off the bottom or anchor your boat. Some landowners' titles contain "kings grants" to exclusive rights to the flowing water. River users point to the Magna Carta as a basis for the public's right to use rivers. In the 13th Century, the exclusion of the public from England's forests and streams helped prompt the Magna Carta, which includes the right to a free fishery and the liberty of navigation. (v9,#2)

Bregman, J. I. "Environmental Laws and Regulations As Project Stoppers", Journal of Environmental Law & Practice 4(no.3, 1996):33. How to use environmental requirements to stop projects--or to prevent this from happening. (v7,#4)


Brende, Eric. Better Off: Flipping the Switch on Technology. New York: Harper Collins, 2004. Brende, a graduate student at MIT, moved in to a AMinimite® (aka Mennonite) community to ask: Was there some baseline of minimal machinery needed for humane convenience, comfort, and sociability - a line below which physical labor was too demanding and above which machines began to create their own demands?

Brenkert, George G., "The Environment, The Moralist, the Corporation and Its Culture," Business Ethics Quarterly 5(1995):675-697. Business has its own special "ethics," which relates not simply to the internal nature of the corporation but also to the corporate (free market) system. Given this special ethics, business cannot in general be environmentally responsible in the manner that classical moralists demand. More far-reaching changes are needed.


Brennan, Andrew, "Environmental Awareness and Liberal Education," British Journal of Educational Studies 39(1991):270-296. There is "potential in environmental studies for the renewal of the educational process." Humans think and orient themselves in the world using "frameworks of ideas." "We can think of the goal of education for eco-literacy as posing a challenge to be met in more or less grand ways. In a minimal way, we can think of exploiting the frameworks familiar to students in the various academic disciplines in order to provide them with some degree of environmental awareness." "A grander proposal for making eco-literacy more widespread [is that] we can perhaps best break way from modes of thought that draw on only one or two frameworks by providing transdisciplinary units and degree programs which
encourage multi-framework thinking. Examples of these include degree programmes in human ecology, drawing upon the disciplines of various sciences as well as philosophy, politics and international law. If we can produce enough graduates to whom such thinking is natural, then there is some chance that a wider range of responses to our environmental problems will be forthcoming."

Brennan was formerly in philosophy at the University of Stirling; he is now at the University of Western Australia, Perth.


Brennan, Andrew, "Poverty, Puritanism and Environmental Conflict," Environmental Values 7(1998): 305-331. The paper proposes two ideas: (1) The wilderness preservation movement has failed to identify key elements involved in situations of environmental conflict. (2) The same movement seems unaware of its location within a tradition which is both elitist and Puritan. Holmes Rolston's recent work on the apparent conflict between feeding people and saving nature appears to exemplify the two points. With respect to point (1), Rolston's treatment fails to address the institutional and structural features which set the agenda for individual human lives. The human ecology of environmental destruction cannot ignore the role of corporate actors such as banks, national governments, transnational corporations, trade unions and so on. These agents interact with each other in various ways and also have an internal structure - perhaps akin to Arthur Koestler's conception of the holarchy - which enables people working within them to avoid taking responsibility for policies that have damaging environmental consequences. As far as thesis (2) is concerned, Rolston's work shares common features with Arne Naess's deep ecology and Aldo Leopold's land ethic. All of these writers draw, perhaps unconsciously, on a tradition of sporting elitism associated with the Great White Hunter. One variety of this tradition combines elitism with a form of Puritanism. KEYWORDS: environmental conflict, Puritanism, poverty, elitism, human ecology, Rolston. Andrew Brennan is at The University of Western Australia. Perth.


Brennan, Andrew, Thinking About Nature: An Investigation of Nature, Value and Ecology. Athens, GA: The University of Georgia Press, 1988. PP. xiii, 235. This is a careful argument in defense of what the author terms "ecological humanism." Ecological humanism is an environmental holism based on an ecological re-interpretation of human nature, without questionable metaphysical assumptions or value claims about systems, collections, or aggregates. In the first half of the book, Brennan discusses epistemological frameworks, the philosophy of science, reduction and holism, functions, and ecological theory, to arrive at the apparently simple core idea: "what something is and does depends in part on where it is" (p. 117). This "ecological" perspective reveals that objects are constituted by a combination of their internal properties and their external relationships.

Ecological theory thus permits a thoroughgoing critique of contemporary moral theory. Utilitarianism, Kantianism, and contract theory all ignore "the ecological facts of life." They assume that value or good can be defined in some abstract way without a regard to context: ecological, natural, social, political, and economic (p. 174, and Chaps. 11 and 12). Ecological humanism creates a theory of value and a system of ethics based on the way humans actually live in a natural and social world: "it involves the recognition that all human life is lived within some natural context and that it is in terms of that context that the identities of very different human lives are forged" (p. 184). The strength of of this book is the blending of several disciplines of philosophy and science. Brennan shows by his practice that environmental philosophy is not a marginal enterprise, but a necessary component of any meaningful epistemology, metaphysics, or ethics. In the process, he offers solutions to several puzzles about human and natural value that have plagued environmental ethics. The book ends with an excellent summary of practical policy proposals. (Katz, Bibl # 2)


Brennan, Andrew A., "Ecological Theory and Value in Nature," Philosophical Inquiry 8, nos. 1-2 (Winter-Spring 1986):66-95. Certain current ecological theories do not support the Deep Ecologist intuition that ecosystems are "superindividual organisms." Brennan thus suggests that a community theory of ecosystemic structure "will most plausibly capture the moraE insights urged by deep ecologists." (p. 89). (Katz, Bibl # 1)

Brennan, Andrew, "Environmental Decision-Making," in R.J. Berry volume, Environmental Dilemmas: Ethics and Decisions (London: Chapman and Hall, 1993), 271 pages. A widespread, puzzling phenomenon underlies our inability to tackle environmental issues. This is the plight of those who are "incontinent" in Aristotle's term. Recent philosophy recognizes self-deception and bad faith as a widespread human failing. We are a long way, in governments, public agencies, and corporations, from full honesty in our debates on the environment. To make progress in tackling our increasingly desperate environmental plight we have to make strenuous
efforts to overcome our myth-making and ready acceptance of partial, shallow versions of the truth. Many of those who regard themselves as morally deep fall foul of such shallowness. Brennan reaches in net result a blend of pessimism and qualified optimism. We are always going to be prone to self-deception and incontinence, deep seated and largely unchanging aspects of human life, but there is nothing equally inevitable about shallow and mythic thinking. These failings can be identified now and guarded against. (v4,#1)

Introductory article, suitable for use with students. Environmental ethics is the discipline that studies the moral relationship of human beings to, and also the value and moral status of, the environment and its nonhuman contents. This entry covers (1) the challenge of environmental ethics to the anthropocentrism (i.e. human-centeredness) embedded in traditional western ethical thinking; (2) the early development of the discipline in the 1960's and 1970's, (3) the connection of deep ecology, feminist environmental ethics, and social ecology to politics, (4) the attempt to apply traditional ethical theories, including consequentialism, deontology, and virtue ethics, to support contemporary environmental concerns, and (5) the focus of environmental literature on wilderness, and possible future developments of the discipline. Brennan is at the University of Western Australia, Perth. (v.13, #3)

Brennan, Andrew, "Ethics, Ecology, and Economics," Biodiversity and Conservation 4(1995):798-811. Also in Cooper, Nigel and Carling, R.C.J., eds., Ecologists and Ethical Judgments. London: Chapman and Hall, 1996. The general structure of an environmental philosophy. There can be many such philosophies, and those with their roots in economic theory have been extensively studied recently. Specific examples include the work of David Pearce and Robert Goodin. Economics-based philosophies can founder on the issue of externalities and a misplaced attempt to provide a comprehensive approach to valuing nature as a bundle of goods and services. It is dangerously easy to slide from considering nature as a standing reserve of processes and objects that have the potential to satisfy human desires to the idea that it is nothing more than that. In general, the consequentialist basis of economics limits its usefulness in contributing to informed environmental decisions. But there is room for a sensitive use of institutional environmental economics as a partial guide for our reflections and choices. Any such development should take on board the existence of a plurality of perspectives on fundamental issues and the pluralism of values that can be found within moral theory itself. Brennan is in philosophy at the University of Western Australia, Perth.

Brennan, Andrew, "Moral Pluralism and the Environment." Environmental Values Vol.1 No.1(1992):15-34. ABSTRACT: Cost-benefit analysis makes the assumption that everything from consumer goods to endangered species may in principle be given a value by which its worth can be compared with that of anything else, even though the actual measurement of such value may be difficult in practice. The assumption is shown to fail, even in simple cases, and the analysis to be incapable of taking into account the transformative value of new experiences. Several kinds of value are identified, by no means all commensurable with one another—a situation with which both economics and contemporary ethical theory must come to terms. A radical moral pluralism is recommended as in no way incompatible with the requirements of rationality, which allows that the business of living decently involves many kinds of principles
and various sorts of responsibilities. In environmental ethics, pluralism offers the hope of reconciling various rival theories even if none of them is universally applicable. KEYWORDS: Cost-benefit analysis, pluralism, preferences, rationality, transformative values. Philosophy Department, University of Western Australia, Nedlands, Perth, WA 6009 Australia.


Brennan, Andrew, ed., The Ethics of the Environment. Aldershot, Hampshire, U.K.: Dartmouth Publishing Co., 1995. 583 pages. U. S. Distributor: Ashgate Publishing Co., Old Post Road, Brookfield, VT 05036. 802/276-3162. Hardcover, $ 149.95. Unlike most other anthologies, this collection is aimed at the research level rather than the introductory one. Brennan has written an introduction which summarizes the intellectual and philosophical problems facing environmental philosophy and supplies a select bibliography. The collection, which looks like a hefty legal volume, is designed mainly for library purchase, and is part of a larger series: The International Research Library of Philosophy. Though expensive, it provides a complete introduction to the original academic literature. Academics may wish to request their librarians to get it. In keeping with the policy of the series, papers are included only if they originally appeared in academic journals. One useful feature of the volume is that the papers are not re-typeset but reprinted as photocopied in their original form, unabridged and including the original journal pagination. Another feature is that essays are grouped together so that subsequent ones comment directly on earlier ones. As a result readers can follow an emerging dialogue. The volume contains 33 papers organized in the following sections: Intrinsic Value and Moral Standing, with papers by P. Taylor, G. H. Paske, A. Brennan, J. O'Neill. Species, Ecosystems and Interests, with papers by H. Rolston, G. Varner and H. Cahen. Deep Ecology and Radical Environmentalism, with papers by A. Naess, F. Mathews, P. Reed, T. Birch, R. Guha and D. M. Johns. Ecology and Feminism, with papers by V. Plumwood, J. Cheney, K. Warren and A. K. Salleh. Are Humans Part of Nature or Separate From It?, with papers by H. Rolston, M. Smith, A. Gunn, J. B. Callicott. Policy Dilemmas and Pluralism, with papers by M. Sagoff, K. Shradar-Frenchette, B. Norton, C. D. Stone, J. B. Callicott and A. Brennan. Brennan teaches philosophy at the University of Western Australia.  

Brennan, Andrew, "Environmental Literacy and Educational Ideal." Environmental Values 3(1994):3-16. Environmental literacy is not encouraged by discipline-based education. Discipline-based education is damaging not only because it breaks the link between experience and theory but also because it encourages learners to believe that complex practical problems can be solved using the resources of just one or two specialist disciplines or frameworks of thought. It is argued that discipline-based education has been extremely successful, and its very success is a factor which explains some of our poor thinking about environmental problems. These problems are highly complex, and it is important for learners to discover the limitations of particularly important in the case of economics. An education which emphasizes the limitations of specialist approaches to complex problems can also be used to help overcome the depersonalizing effect of bureaucracies. KEYWORDS: Environmental literacy, frameworks, education, ecology, Dewey, Freire, economics, liberal education, Hirst, bureaucracy. Brennan is with Dept. of Philosophy, University of Western Australia, Perth. (EV)
Brennan, Andrew, "Environmental Ethics," in Craig, Edward, ed., Routledge Encyclopedia of Philosophy, 10 vols. (London: Routledge, 1998), in vol. 3, pages 333-336. Also available on CD. This competent article introducing the field in this major, ten-volume encyclopedia, effectively replacing the old five-volume Edwards Encyclopedia of Philosophy is a welcome addition to the literature, and recognizes that environmental ethics has become an established discipline within philosophy. Brennan is in philosophy at the University of Western Australia, Perth. (The set is expensive, about ,2,000 with the CD, so your college and university librarians may need some encouragement to purchase it.)

Brennan, Andrew, "The Moral Standing of Natural Objects," Environmental Ethics 6(1984):35-56. Perhaps the most significant paper in recent years. Brennan offers an original candidate for the source of "moral considerability" or "intrinsic value" in natural entities: natural entities lack an "intrinsic function"; they were not designed for a purpose. It is that lack of design which distinguishes them from man-made artifacts. Brennan uses this concept to show the difference in moral attitude towards natural objects and art objects. The end of this essay begins to tackle some of the problems of holism, but the work is left undone: do whole groups, such as families or ecosystems, lack an intrinsic function? If so, then these deserve moral consideration over and above the individuals that comprise them. (Katz, Bibl # 1)


Brennan, Andrew. "The Moral Standing of Natural Objects." Environmental Ethics 6(1984):35-56. Human beings are, as far as we know, the only animals to have moral concerns and to adopt moralities, but it would be a mistake to be misled by this fact into thinking that humans are also the only proper objects of moral consideration. I argue that we ought to allow even nonliving things a significant moral status, thus denying the conclusion of much contemporary moral thinking. First, I consider the possibility of giving moral consideration to nonliving things. Second, I put forward grounds which justify this extension of morality beyond its conventional boundaries. Third, I argue that natural objects have a status different from a special class of artifacts--works of art. Fourth, I discuss the notion of interest, and fifth I look briefly at the status of natural systems and at ways we might link the proposed extension of moral considerability with the rest of our moral thinking. Brennan is at the Philosophy Dept., University of Stirling, Stirling, Scotland, UK. (EE)
Brennan, Andrew. University of Stirling, Scotland, has collaborated with Sean Smith of St. Andrews University, Scotland, to produce a comprehensive 45 page bibliography of the last twenty years of environmental ethics. Three separate publications are: Anthony Ellis, Ethics for Environmentalists; Andrew Brennan, Environmental Philosophy; and Andrew Brennan, Bibliography of Recent Work in Environmental Ethics. They are available from The Centre for Philosophy and Public Affairs, University of St. Andrews, KY16 9AL, Scotland. (v1,#1)

Brennan, Jason, ADominating Nature, @ Environmental Values 16(2007): 513-528. Something is wrong with the desire to dominate nature. In this paper, I explain both the causes and solution to anti-environmental attitudes within the framework of Hegel's master-slave dialectic. I argue that the master-slave dialectic (interpreted as a metaphor, rather than literally) can provide reasons against taking an attitude of domination, and instead gives reasons to seek to be worthy of respect from nature, though nature cannot, of course, respect us. I then discuss what the social and economic conditions of moving to a post-domination philosophy appear to be. Brennan is in political science, Brown University, Providence, Rhode Island.


Brick, P., "The Greening of Political Science: Growth Pains and New Directions," Perspectives on Politics 2(no. 2, 2004):337-346. Environmental politics is often characterized, incorrectly, as an "advocacy field." when it is typically much more "objective."

Brick, Phil. "Determined Opposition: The Wise Use Movement Challenges Environmentalism," Environment 37(no.8, Oct. 1995):16-. The success of the Wise Use movement articulates the need for environmental activists to reassess their strategies as the nation's political and social climate changes. (v6,#4)


Bricker, Jennie L., and David E. Filippi, "Endangered Species Act Enforcement and Western Water Law," Environmental Law 30(no.4, 2000): 735-. Ms. Bricker and Mr. Filippi examine the intersection between the federal Endangered Species Act and western state water law. While the federal fish agencies are calling on water users to contribute a "proportionate share" of their water rights to meet instream flow needs for listed fish populations, the authors contend that a more precise, predictable, and fair approach is one that adheres to the basic principles of the prior appropriation doctrine. (v.12,#3)

Bricker, Jennie, "Wheelchair Accessibility in Wilderness Areas: The Nexus Between the ADA and the Wilderness Act", Environmental Law, 25(No.4, 1995):1243-. Bricker explores the interaction of the Americans with Disabilities Act and the Wilderness Act to determine whether wilderness areas can be made more accessible to individuals with disabilities while simultaneously protecting "wilderness character" in those areas. She concludes that greater access is allowable under the Wilderness Act, though not reflected adequately in currently proposed ADA regulations. (v7,#1)


Bridges, Olga, Bridges, J.W.  *Loosing Hope: The Environment and Health in Russia*. 288 pp. $68.95. Brookfield, Vt.: Ashgate, 1996.  An account of the various environmental factors that have resulted in the appalling deterioration of public health in Russia over the past 5-8 years and of the political, legal, technical and economic measures being taken to remedy the situation. (v8,#2)


Briggs, John M. et al., "An Ecosystem in Transition: Causes and Consequences of the Conversion of Mesic Grassland to Shrubland,"  *BioScience* 55(no.3, March 2005):243-255(13). Woody plant expansion is one of the greatest contemporary threats to mesic grasslands of the central United States. In this article, we synthesize more than 20 years of research to elucidate the causes and consequences of the ongoing transition of C4-dominated grasslands to savanna-like ecosystems codominated by grasses and woody plants. This transition is contingent on fire-free intervals, which provide the opportunity for recruitment both of new individuals and of additional shrub and tree species into this grassland. Once shrubs establish, their cover increases regardless of fire frequency, and infrequent fires accelerate the spread of some shrub species. This process has resulted in a new dynamic state of shrub-grass coexistence in the mesic grasslands of North America. Important consequences of this shift in plant life-form abundance include alterations in plant productivity, species diversity, and carbon storage. Without drastic measures such as mechanical removal of shrubs, it is unlikely that management of fire and grazing regimes alone will be sufficient to restore historic grass dominance in these ecosystems.

Briggs, Robert.  "Wild Thoughts: A Deconstructive Environmental Ethics?"  *Environmental Ethics* 23(2001):115-134. Although environmental ethics has become more familiar and comfortable with the work of postmodernism, "deconstruction" in particular continues to be...
depicted as "destructive" and "nihilistic." A close examination of some specific works of deconstruction, however, shows that, far from denying responsibilities to the environment, deconstruction seeks to affirm a radical obligation toward the "other." Because this possibility is habitually ruled out by denunciations of deconstruction's imputed relativism, I begin with a dramatized account of the possible reception of deconstruction within environmental ethics in order to stage the ethical implications of modes of criticism. I then discuss specific parallels between the work of deconstruction and that of environmental ethics, and suggest that a deconstructive spirit is at the heart of environmental philosophy's recent and most important work on the question of "universal consideration." (EE)

Bright, A. D., Barro, S. C., and Burtz, R. T., "Public Attitudes toward Ecological Restoration in the Chicago Metropolitan Region," Society and Natural Resources 15(no.9, 2002): 763-86. (v.13,#4)


Brinkmann, Klaus, ed., Ethics: The Proceedings of the Twentieth World Congress of Philosophy, vol. 1 (Bowling Green Ohio: Philosophy Documentation Center, 1999). Note the extent to which environmental ethics is quite well represented in this, the first of twelve World Congress volumes. Contains:
--Attfield, Robin, "Depth, Trusteeship, and Redistribution," pages 159-168. I review some themes of Naess's "The Shallow and the Deep, Long-Range Ecology Movements" article and Routley's "Is There a Need for a New, An Environmental Ethic" presentation at the 1973 World Congress. Naess's affiliation to the Deep Ecology Movement deserves acclaim, theoretic entanglements notwithstanding. Routley advocated a new ethic because no Judaeo-Christian ethical tradition could cope with widespread environmental intuitions. However, the ethical tradition of stewardship can satisfy such concerns. It is compatible with environmental values, need not be managerial, and can assume a secular form. But the related responsibilities vary with wealth and power, and structural change is necessary to empower people currently unable to uphold it. Attfield is in philosophy at the University of Wales, Cardiff.
--Rolston, Holmes, III, "Nature and Culture in Environmental Ethics," Pages 151-158. The pivotal claim in environmental ethics is that humans in their cultures are out of sustainable relationships to the natural environments compromising the landscapes on which these cultures are superimposed. But bringing such culture into more intelligent relationships with the natural world requires not so much "naturalizing culture" as discriminating recognition of the radical differences between nature and culture, on the basis of which a dialectical ethic of complementarity may be possible. How far nature can and ought be managed and be transformed into humanized nature, resulting in "the end of nature," is a provocative question. Environmental ethics ought also to seek nature as an end in itself. Rolston is in philosophy at Colorado State University.
--Passmore, John, "Philosophy and Ecology," pages 141-150. There was a time when ecological problems were of no interest to philosophy. Now, these issues have raised philosophical
problems in several areas. In moral philosophy, one question is what moral obligations, if any, we have to future generations, and another is how far we have moral obligations relating to the treatment and the preservation of plants, animals and atmospheres. In political philosophy, the issue is the range of such concepts as rights and justice, and whether or not they are limited to human relationships. As to the metaphysical question, we have to ask whether there is something about human beings which entitles us to consider them as being supernatural and whether we can think of Nature as an entity of which each human being constitutes a part. Passmore is in the Historical Studies Department, Australian National University, Canberra.

--Häyry, Matt and Takala, Tuija, "Biotechnology and the Environment: From Moral Objections to Ethical Analysis," pages 169-178. Rights can be founded in a variety of ethical systems--e.g. on natural law, on the duties postulated by deontological ethics, and on the consequences of our actions. The concept of risk we will outline supports a theory of rights which provides at least individual human beings with the entitlement not to be harmed by the environmental impacts of biotechnology. The analysis can, we believe, also be extended to the rights of animals as well as ecosystems, both of which can be harmed by human actions. We argue that further examination of these harms and rights would be the best way to proceed from emotional moral objections to truly ethical analyses in the context of biotechnology and the environment. Häyry and Takala are in philosophy, University of Helsinki.

--Skirbekk, Gunnar, "Discourse-ethical Gradualism: Beyond Anthropocentrism and Biocentrism?", pages 95-106. My question is the following: to what extent is ethical anthropocentrism tenable? In a "discourse ethical" perspective I will consider some case-oriented arguments in favor of a paradigmatically unique ethical standing for humans and some arguments in favor of an ethical gradualism between humans and other mammals and between humans and nature, ending with a conclusion in favor of a fair treatment of all moral subjects, human and non-human. Skirbekk is in philosophy, University of Bergen, Norway. (v.10,#3)

Brito, Daniel, "Lack of Adequate Taxonomic Knowledge May Hinder Endemic Mammal Conservation in the Brazilian Atlantic Forest," Biodiversity and Conservation 13(2004):2135-2144. The Atlantic Forest in Brazil is a biodiversity hotspot, and we do not know taxonomically even the charismatic megafauna in it. New species are discovered, described and taxonomically rearranged at an astounding rate. Brito is a Brazilian ecologist, Universidade Federal de Minas Gerais.

Brittan, Jr., Gordon G., "Wind, energy, landscape: reconciling nature and technology," Philosophy and Geography 4 (No. 2, 2001): 169-184. Despite the fact that they are in most respects environmentally benign, electricity-generating wind turbines frequently encounter a great deal of resistance. Much of this resistance is aesthetic in character; wind turbines somehow do not "fit" in the landscape. On one (classical) view, landscapes are beautiful to the extent that they are "scenic", well-balanced compositions. But wind turbines introduce a discordant note, they are out of "scale". On another (ecological) view, landscapes are beautiful if their various elements form a stable and integrated organic whole. But wind turbines are difficult to integrate into the biotic community; at least in certain respects, they are like "weeds". Moreover, there is a reason why the 100-meter, three bladed wind turbines now favored by the industry cannot very well be accommodated to any landscape view. They are, as Albert Borgmann would put it, characteristic of contemporary technology, distanced "devices" for the production of a commodity rather than "things" with which one can engage. It follows that the only way in
which the aesthetic resistance to wind turbines can be overcome is to make them more "thing-like". One such "thing-like" turbine is discussed. Brittan is Regent's Professor of Philosophy at Montana State University. (P&G)

Brittan, Jr., Gordon G., "The Secrets of Antelope," Erkenntnis 51(1999):59-77. Daniel Dennett claims, in Consciousness Explained: "Antelope, in their herds, have no secrets and no way of getting any. So an antelope is probably no more capable of hatching a secret plan than it is capable of counting to a hundred or enjoying the colors of a sunset." Brittan replies: "I am not at all sure what the qualification 'in their herds' is supposed to entail. Otherwise, it is simply false that antelope (at least the American antelope or pronghorns) have no secrets, as I can attest on the basis of watching them very carefully over the past 25 years." A doe, for example, keeps it secret where her fawns is hidden. When he is not watching antelope, figuring out their secrets, Brittan is professor of philosophy at Montana State University. This is a theme issue of Erkenntnis on "Animal Minds." (v10,#4)

Britten, Hugh B., Peter F. Brussard, and Dennis D. Murphy, "The Pending Extinction of the Uncompahgre Fritillary Butterfly," Conservation Biology 8(1994):86-94. Found only on two Colorado alpine peaks, the species has low genetic variability, and persistent drought conditions in the 1980's have brought further decline. Human disturbance has been a factor, but probably not the critical factor. See comment in issues section below. Britten is in biology at Montana State University, Brussard is in biology at the University of Nevada-Reno, and Murphy is at the Center for Conservation Biology at Stanford University. (v5,#1)

Broad, Robin and John Cavanagh. Plundering Paradise: People, Power and the Struggle for the Environment in the Philippines. Berkeley: University of California Press, 1994. 197 pages. $25.00. The Philippine Islands are one of the most advanced scenes of ecological degradation in the tropical world today. The causes are a global economy, foreign interests that use Filipino elites for their own interests. Operating through one of the most repressive political and military systems in Asia, they have generated mass poverty on a scale that is a major contributor to the downward environmental spiral. Yet grass-roots environmental protest movements have arisen, social movements emerging involving mass-based organizations of the political left, church activists, environmentalists, and NGOs. Northern environmentalists need to realize that environmental degradation in the tropics is primarily rooted in social exploitation, and that the exploited are a major source of hope and potential alliance for those who care both about conservation and people. A readable account of local activism and development in the post-Marcos, post-Cold-War nation. (v5,#2)


In this paper I explore two central sets of issues. First, I investigate how the argument holds up when labor is involved in discovering, developing or preparing natural resources for appropriation. I consider some persuasive reasons why one might think Wolf's arguments lose force in such cases. I also indicate how to accommodate these concerns without diminishing the force of Wolf's main arguments. Second, I show how either the examples Wolf uses do not support the conclusion he is pressing, or the argument has extremely far-reaching implications. I argue that either of these conclusions is problematic for Wolf's argument as thus far developed. Brock is in philosophy, University of Auckland, Auckland, New Zealand. (E&E)


Brockelman, Paul T., *Cosmology and Creation: The Spiritual Significance of Contemporary Cosmology*. New York: Oxford University Press, 1999. Written because "I felt that we needed to renew our spiritual sense of reverence for nature as intrinsically valuable in itself and not merely extrinsically valuable in so far as it provides 'resources' which in a utilitarian manner we can turn into 'useful' products for the consumer industrial societies." (p. xi). Brockelman is University Professor of Religious Studies and Professor of Philosophy at the University of New Hampshire. (v.14, #4)


Broder, John M., "Cleaner Los Angeles Air? Don't Hold Your Breath," *New York Times*, November 14, 2004, p. 16. Smog is down, but probably not for long. Some unusual weather has brought rare good news to the nation's most polluted city. (v.14, #4)


Brook, Isis, and Brady, Emily, "Topiary: Ethics and aesthetics," *Ethics and the Environment* 8(no. 1, 2003):127-143. We discuss ethical and aesthetic questions in relation to the gardening practice of topiary. We begin by considering the ethical concerns arising from the uneasiness some appreciators might feel when experiencing topiary as a manipulation or contortion of natural processes. We then turn to ways in which topiary might cause an 'aesthetic affront' through the humanizing effects of sentimentality and falsification of nature (most often found in representational rather than abstract topiary). Our contention is that successful topiary emerges through a dynamic and positive relationship between topiarist and tree, where the gardener works with nature's forms instead of in strong opposition to them. Appreciation of successful topiary, we shall argue, is marked by an experience of both the tree as a living thing and the artifice which has shaped it. The authors are at Lancaster University, UK. (E&E)


Brook, Isis, "Can Merleau-Ponty's Notion of `Flesh' Inform or even Transform Environmental Thinking?" *Environmental Values* 14(2005): 353-362. Reference to Merleau-Ponty's ideas surfaces in environmental thinking from time to time. This paper examines whether, and in what way, his ideas could be helpful to that thinking. In order to arrive at a conclusion I examine in detail and attempt to clarify the notions of "Flesh" and "Earth" in order to see if they can carry the meanings that commentators sometimes attribute to them. With a clearer outline of what he was saying in place, I suggest that the new ontology that Merleau-Ponty introduces could help to transform environmental thinking, but that careful argumentation is required to show this. Brook is in environment, philosophy, and public policy, Lancaster University, UK. (EV)

Brook, Isis, AWildness in the English Garden Tradition: A Reassessment of the Picturesque from Environmental Philosophy, *Ethics and the Environment* 13(no. 1, 2008):105-119. The picturesque is usually interpreted as an admiration of 'picture-like,' and thus inauthentic, nature. In contrast, this paper sets out an interpretation that is more in accord with the contemporary love of wildness. This paper will briefly cover some garden history in order to contextualize the discussion and proceed by reassessing the picturesque through the eighteenth century works of Price and Watelet. It will then identify six themes in their work (variety, intricacy, engagement, time, chance, and transition) and show that, far from forcing a 'picture-like' stereotype on nature, the picturesque guided the way for a new appreciation of wildnessCon that resonates with
contemporary environmental philosophy. Isis Brook is senior lecturer in ethics at the Centre for Professional Ethics, University of Central Lancashire, UK

Brooke, James, "Bigger and Bolder Population of Bears Incites Fear in Japan," New York Times, November 7, 2004, p. 15. More than 90 persons have been injured since April by a newly aggressive population of bears in northern Japan. The bear population has been expanding in numbers in a region with a shrinking human population, but a record number of typhoons has ruined the acorn harvest, other food supplies are also not available, and the hungry bears have turned to finding food in the villages. (v.14, #4)

Brooke, James, "U.S. Hopes to Buy Picture-Perfect Slice of the West," New York Times, August 25, 1998, A1, A14. Baca Ranch Purchase. Biggest in a quarter century. The U.S. Forest Service and the U.S. Congress have moved closer to buying 95,000 acres of land in New Mexico, a ranch so emblematic of the U.S. West that it has served as a backdrop for Marlboro and Stetson hat ads. It is also the largest such tract of land near major cities, in this case Albuquerque and Santa Fe. The ranch is surrounded by Santa Fe National Forest. The ranch has 7,000 elk and 3,000 cows. (v.9,#3)

Brooke, James, "In the Balance, the Future of a Lake," New York Times (9/22/97): A10. Should Lake Powell be drained? Lake Powell is a 100-miles long lake that straddles the Utah/Arizona border and is formed by the Glen Canyon Dam on the Colorado River. When David Brower, a grandfather of the modern American environmental movement, proposed last year to drain Lake Power, few people took him seriously. Brower has felt guilty for 40 years for dropping opposition to the Glen Canyon Dam as a tradeoff that helped prevent construction of a dam that would have flooded Dinosaur National Monument in Colorado. With unanimous support from the Sierra Club Board of Directors and with backing from a Utah environmental group, the proposal to drain the nation's second largest artificial lake is now getting significant public attention. Utah politicians held Congressional hearings on the proposal in an attempt to embarrass its proponents.

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

A restored Glen Canyon would support significant recreation and employment opportunities. While many find the lake quite beautiful, Edward Abbey once wrote that "the difference between the present reservoir, with its silent sterile shores and debris-choked side canyons, and the original Glen Canyon, is the difference between death and life. Glen Canyon was alive. Lake Powell is a graveyard." A former commissioner of the Federal Bureau of Reclamation (which built and operates the dam) argues that "Building a dam is the same as
constructing a nuclear plant; you get immediate benefits, but you also get huge long-term costs. And a dam, just like a nuclear plant, can leave a legacy of environmental destruction that can take generations to correct." Although drainage of Lake Powell is unlikely, Congress has already agreed to pay to remove two dams on the Elwha River in Washington State to restore a salmon fishery. For other stories see Daniel P. Beard, "Dams Aren't Forever," New York Times (10/6/97): A17. Brad Knickerbocker, "Turning Man-Made Creations Back to Nature," Christian Science Monitor 89 (26 September 1997): 1, 5. (v8,#3)


Brookes, Graham, and Peter Barfoot, "GM Crops: The Global Economic and Environmental Impact--The First Nine Years 1996-2004," AgBioForum 8(nos. 2& 3, 2005):187-196. GM crops have been regularly commercially planted for about a decade. This study finds great economic benefits, largely from reduced pesticide use, since the GM crops are resistant to pests and do not need so much pesticide. This also results in reduced use of fossil fuels, reduced carbon dioxide emissions, and more carbon sequestered in the soil (since there is less need for plowing). The study also finds a much reduced environmental footprint, since the reduced pesticide use means less pesticide spilling off the fields into the rivers, less adverse effects on birds and other wildlife. GM crops tend to keep the nearby ecosystems healthier than was formerly the case with heavy pesticide use. The authors are with PG Economics Ltd., Dorchester, UK.

Brooks, Daniel R. and Deborah A. McLennan, Parascript: Parasites and the Language of Evolution. Washington, DC: Smithsonian Institution Press, 1993. 450 pages. $ 25.00 paper. The relationship between parasite and host is homologous to that between animal and plant. The many traditional generalizations about parasite evolution are myths, unsupported by data. "Parasites are not the degenerate, overspecialized, host-dependent creatures ... envisioned by the proponents of orthogenesis. They are instead successful, innovative creatures" (p. 181). "Parasites are still an enigma. But ... they need no longer carry an evolutionary stigma" (p. 209). The authors are in the department of zoology at the University of Toronto. (v4,#2)

Brooks, L. Anathea and VanDeveer, Stacy D., eds., Saving the Seas: Values, Scientists, and International Governance. College Park, MD: Maryland Sea Grant, 1997. 480 pages. $ 30.00. Maryland Sea Grant, 0112 Skinner Hall, University of Maryland, College Park, MD: 20742. Tel. 301/405-6376. Fax 301/314-9581. Eighteen essays by scholars in the area of marine and environmental management. Focus is on the world's coastal seas, where there is intense competition for resources, as well as for harbors, fisheries, shipping, and defense, also culturally important places and traditional ways of life. (v.8,#4)


Brooks, T; Balmford, A; Burgess, N; Fjeldsa, J; Hansen, LA; Moore, J; Rahbek, C; Wiliams, P, "Toward a Blueprint for Conservation in Africa," Bioscience 51(no. 8, 2001):613-624. (v.13,#1)


Brookshire, DS; Burness, HS; Chermak, JM; Krause, K, "Western Urban Water Demand", Natural Resources Journal 42(no.4, 2002):873-898.


Broom, D.M., "A Usable Definition of Animal Welfare", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. A definition of the welfare of an animal which can be used in scientific studies, legislation and other practical work is: the welfare of an individual is its state as regards its attempts to cope with its environment. A variety of measurements can be used to pinpoint the individual's state on a continuum from very good to very poor welfare. Welfare can be poor because the individual is having difficulty in coping or because of failure to cope. Poor welfare includes stress, which is defined as an environmental effect on an individual which overtaxes its control systems and thus reduces its fitness or appears likely to do so. It also includes situations in which behavioural, physiological or immunological measures indicate that coping is difficult even if biological fitness is not reduced. Suffering is an important aspect of poor welfare. While much of poor welfare involves suffering, examples are given of situations in which welfare is poor in the absence of suffering. If suffering occurs in addition to injury or immunosuppression, then welfare is even poorer. Scientific studies of welfare should include direct measures of poor welfare as well as measures of the strengths of preferences and aversions. Measurements should be carried out in an objective way and moral judgments about what is tolerable should be made afterwards. Broom is in the Department of Clinical Veterinary Medicine, Cambridge University, Madingley Road, Cambridge CB3 0ES, United Kingdom.


Brosius, J. Peter, Anna Lowenhaupt Tsing, and Charles Zerner, eds. Communities and Conservation: Histories and Politics of Community-Based Natural Resource Management. Walnut Creek, CA: AltMira Press, 2005. The environmentalists in this collection offer an in-
depth analysis and call to advocacy for community-based natural resource management (CBNRM). Their overview of this transnational movement reveals important links between environmental management and social justice agendas for sustainable use of resources by local communities. In this volume, leaders who have been instrumental in creating and shaping CBNRM describe their model programs; the countermapping movement and collective claims to land and resources; legal strategies for gaining rights to resources and territories; biodiversity conservation and land stabilization priorities; and environmental justice and minority rights.


Brotons, L; Monkkonen, M; Huhta, E; Nikula, A; Rajasarkka, A, "Effects of landscape structure and forest reserve location on old-growth forest bird species in Northern Finland," Landscape Ecology 18(no.4, 2003):377-393. (v.14, #4)

Broussard, Shorna R., Stephen B. Jones, and Connie A. Flanagan, "Forest Stewardship Education: Fostering Positive Attitudes in Urban Youth," Journal Of Forestry 99(no.1, 2001 Jan 01): 37-. Philadelphia students who participated in a forestry-based environmental education program were more knowledgeable about forestry and gained a great understanding of forest management, shifting their attitudes in favor of harvesting trees sustainably. (v.12,#3)


Brouwer, Roy, Neil Powe, R. Kerry Turner, Ian J. Bateman, and Ian H. Langford. "Public Attitudes to Contingent Valuation and Public Consultation." Environmental Values 8(1999):325-347. ABSTRACT: The use of cost-benefit analysis (CBA) in environmental decision-making and the contingent valuation (CV) technique as input into traditional CBA to elicit environmental values in monetary terms has stimulated an extensive debate. Critics have questioned the appropriateness of both the method and the technique. Some alternative suggestions for the elicitation of environmental values are based on a social process of deliberation. However, just like traditional economic theory, these alternative approaches may be questioned on their implicit value judgements regarding the legitimacy of the social-political organisation of the process of value elicitation. Instead of making assumptions a priori, research efforts should be focused on the processes by which actual public attitudes and preferences towards the environment can best be elicited and fed into environmental or other public policy decision-making. In the study presented in this paper, support was found for both the individual WTP based approach and a participatory social deliberation approach to inform the environmental decision-making process, suggesting that a combination of both approaches is most appropriate. KEYWORDS: Contingent environmental valuation, focus groups, public consultation, public deliberation. Roy Brouwer, Neil Powe, R. Kerry Turner, Ian J. Bateman, and Ian H. Langford, Centre for Social and Economic Research on the Global Environment

Browder, JO; Pedlowski, MA; Summers, PM, "Land Use Patterns in the Brazilian Amazon: Comparative Farm-Level Evidence from Rondonia", Human Ecology 32 (no.2, 2004): 197-224(28).


Brower, David, For Earth's Sake: The Life and Times of David Brower (Salt Lake City, UT: Gibbs Smith, 1990). $ 24.95. 556 pages. (v2,#1)

Brower, Kenneth, One Earth. San Francisco: Collins, 1990. $ 39.95. Photographs recording the environmental impact of human activities, including men, women, and children around the world working and fighting to save a bit of Earth. (v1,#4)

Browers, Michaelle L. "Jefferson's Land Ethic: Environmentalist Ideas in Notes on the State of Virginia." Environmental Ethics 21(1999):43-57. I articulate what I refer to as Jefferson's "land ethic," drawing primarily from his Notes on the State of Virginia. In the first section, I discuss Jefferson's conception of the intimate relationship between the natural and political constitution of America and his vindication of both. In the second section, I examine the centrality of the environment in Jefferson's political vision for America: a land-based republicanism. In the third section, I elaborate Jefferson's view as to the proper relationship between human beings and their environment by focusing on the form of nature to which he believes human beings most intimately relate: one's estate. Jefferson's understanding of the land draws from John Locke's theory of property, but whereas Locke's concept of property is closely associated with the economic values that facilitate human destruction of the environment, Jefferson's environmentalism focuses on the other side of the relation: the ways in which a particular nature--a climate, one's landholding, the New World in general--can influence human nature and politics. (EE)

segment who are often presented as scapegoats or stereotypes: the liberal's "rednecks" and industry's and the right wings "silent majority." These are the people of the Rogue Valley in Southwest Oregon, where there is a volatile clash of logging and environmental interests, and with an influx of wealthy suburbanites from California. Brown is an independent scholar and activist. (v6,#1)


Brown, Charles S., and Ted Toadvine, eds. *Nature=s Edge: Boundary Explorations in Ecological Theory and Practice*. Albany: State University of New York Press, 2007. Contents include: (1) ABoundaries and Darwin: Bridging the Great Divide@ by Max Oelschlaeger, (2) ALamarck Redux: Temporal Scale as the Key to the Boundary Between the Human and Natural Worlds@ by J. Baird Callicott, (3) AThe Ethical Boundaries of Animal Biotechnology: Descartes, Spinoza, and Darwin@ by Strachan Donnelley, (4) ACutting Nature at the Seams: Beyond Species Boundaries in a World of Diversity@ by Jon Jensen, (5) ARespect for Experience as a Way Into the Problem of Moral Boundaries@ by Charles S. Brown, (6) ABoundarylessness: Introducing a Systems Heuristic for Conceptualizing Complexity@ by Beth Dempster, (7) ABoundaries on the Edge@ by Irene J. Klaver, (8) ARemapping Land Use: Remote Sensing, Institutional Approaches, and Landscape Boundaries@ by Firooza Pavri, (9) ABoundaries, Communities, and Politics@ by Anna L. Peterson, (10) AThe Moral Economy and Politics of Water in the Arid American West@ by T. Clay Arnold, (11) AThe Need for a Taxonomy of Boundaries@ by Wes Jackson and Jerry Glover, (12) AHow to do Things with Food: A Plea for Multiple Ontologies@ by Bruce Hirsch, and (13) ACulture and Cultivation: Prolegomena to a Philosophy of Agriculture@ by Ted Toadvine.


Brown, Charles S., and Ted Toadvine, eds. *Nature=s Edge: Boundary Explorations in Ecological Theory and Practice*. Albany: State University of New York Press, 2007. Contents include: (1) ABoundaries and Darwin: Bridging the Great Divide@ by Max Oelschlaeger, (2) ALamarck Redux: Temporal Scale as the Key to the Boundary Between the Human and Natural Worlds@ by J. Baird Callicott, (3) AThe Ethical Boundaries of Animal Biotechnology: Descartes, Spinoza, and Darwin@ by Strachan Donnelley, (4) ACutting Nature at the Seams: Beyond Species Boundaries in a World of Diversity@ by Jon Jensen, (5) ARespect for Experience as a Way Into the Problem of Moral Boundaries@ by Charles S. Brown, (6) ABoundarylessness: Introducing a Systems Heuristic for Conceptualizing Complexity@ by Beth Dempster, (7) ABoundaries on the Edge@ by Irene J. Klaver, (8) ARemapping Land Use: Remote Sensing, Institutional Approaches, and Landscape Boundaries@ by Firooza Pavri, (9) ABoundaries, Communities, and
Politics@ by Anna L. Peterson, (10) AThe Moral Economy and Politics of Water in the Arid American West@ by T. Clay Arnold, (11) AThe Need for a Taxonomy of Boundaries@ by Wes Jackson and Jerry Glover, (12) AHow to do Things with Food: A Plea for Multiple Ontologies@ by Bruce Hirsch, and (13) ACulture and Cultivation: Prolegomena to a Philosophy of Agriculture@ by Ted Toadvine.

Brown, Chip, Good Morning Midnight: Life and Death in the Wild. New York: Riverhead Books (Penguin Group), 2004. The remarkable life and haunting death of Guy Waterman. Waterman was from a prominent family, a gifted speech writer, and a New England outdoorsman and mountaineer of some renown. After fighting depression, one afternoon in the winter of 2000, having discussed his plans in detail with his wife, he walked away from her and their home. He took a familiar path up into the mountains of New Hampshire, sat down and died by freezing, alone with the ice, rocks, and wind. (v. 15, # 3)


Brown, Donald A. "Ethics, Science, and Environmental Regulation." Environmental Ethics 9(1987):331-49. Because complex environmental problems are relegated to scientific experts, the ethical questions that are embedded in these problems are often hidden or distorted in scientific and administrative methodology and communication. The administrative process requires that facts and values be separated. Those values that cannot simply be ignored are usually translated into technical economic language and settled in terms of economic costs and benefits. Calls for regulatory reform--i.e., to reduce or eliminate environmental regulation create additional pressures on analysts that encourage them to focus on quantitative questions at the expense of qualitative ones. Distortion can also result from the use of standard risk assessment procedures and from the improper placement of burden of proof on government agencies. The greatest problem, nevertheless, is the narrow scientific training of technical experts which frequently leaves them unprepared to deal with the ethical and value issues in environmental public policy. Brown is in the department of Environmental Resources, Harrisburg, PA. (EE)


Brown, Donald A., "Ethics, Science, and Environmental Regulation," Environmental Ethics 9(1987):331349. A good overview and analysis of the problems encountered by policymakers in environmental regulation and reform. The central conceptual problem is the separation of facts and values; the main practical problem is the lack of ethical training by the scientific experts involved in the decisionmaking process. (Katz, Bibl # 1)


Brown, Donald A., John Lemons, 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.

Brown is in the department of Environmental Resources, Harrisburg, PA. Lemons is in the department of Life Sciences, University of New England, Biddeford, ME. Varner is in the philosophy department, Texas A & M University, College Station, TX. (EE)

Brown, Donald, A., *American Heat: Ethical Problems with the United States' Response to Global Warming*. Blue Ridge Summit, PA: Rowman and Littlefield, 2002. The U.S., once a leader in environmental policy, has often become the major barrier to protecting the world environment. An ethical focus on global environment matters is the key to achieving a globally acceptable solution. Brown is senior counsel on Sustainable Development for the Pennsylvania Department of Environmental Resources. (v.13,#1)


Brown, G. G., P. Reed, and C. C. Harris, "Testing a Place-Based Theory for Environmental Evaluation: An Alaska Case Study," *Applied Geography* 22(2002):49-76. Do people value landscapes more if their evaluation is based on a sense of place, especially if the landscape is near where they live? A study of the Chugach National Forest in Alaska. Ecosystem values are not uniformly distributed across the landscape, that is, not spatially random, and some spatial relationships exist between selected ecosystem values and point of residence (community). Brown is in Environmental Science, Alaska Pacific University. Reed is with USDA Forest Service, Chugach National Forest, Anchorage, AK. Harris is in Resource Recreation and Tourism, University of Idaho, Moscow, ID.
Brown, Gregory, and Reed, Patrick, "Validation of a Forest Values Typology for Use in National Forest Planning," *Forest Science* 46(no. 2, 2000):240-247. Public values for national forest lands are assumed to underlie preferences for actual forest use and to define the content for management. In a survey of Alaska residents, (1) respondents were able to identify with 13 distinct forest values based on a modified forest value topology developed by Holmes Rolston and James Coufal. (2) No obvious findings indicated that the 13 value types could be simplified. (3) Small, but statistically significant correlations were found between these values and attitudes toward logging and mining. (4) Forest values are modestly predictive of preferences for specific forest planning decisions. Brown is in Environmental Science, Alaska Pacific University, Anchorage. Reed is with Chugach National Forest, Anchorage. (v.13, #3)


Brown, James H. *Macroecology*. Chicago: University of Chicago Press, 1995. 270 pp. $42.50 cloth, $15.95 paper. Brown proposes a radical new research agenda designed to broaden the scope of ecology so that it can address questions on much larger spatial and temporal scales. Much ecological research is narrowly focused and experimental, providing detailed information that cannot be used to generalize from one ecological community or time period to another. Brown draws on data from many disciplines to create a much broader picture with greater potential for generalization.

Brown, Jennifer, ed., *Environmental Threats: Perception, Analysis and Management*. London: Belhaven Press, 1989. 160 pages. Cloth. , 39.00. Eight essays by British social theorists who study risk. Some of the arguments: Lay or public risk attitudes are as important and valuable as those who are experts. Expert risk assessment is a doubtful way to handle environmental threats that are highly uncertain. Technical experts ought to be more sensitive to the underlying uncertainties in risk assessment. Different social risk perceptions underlying the Sellafield controversy over nuclear risk. Social risks associated with biotechnology. The public is not irrational in its aversion to many environmental and technological risks; rather, there is a plurality of rationalities applicable to risk. Different types of uncertainties beset quantitative risk assessment and allow for various evaluations of environmental threats. "One of the most important contemporary volumes on the social aspects of risk" (Kristin Shrader-Frechette). (v4,#4)


Brown, Kathryn S. "Do Disease Cycles Follow Changes in Weather?", *Bioscience* 46(no.7, 1996):479. Researchers ponder global warming's effect on the carriers of human illness. (v7,#4)

Brown, Kathryn S. "Life on the Molecular Farm." *Bioscience* 46(no.2, Feb.1996):80. Transgenic plants are extending the range of chemical production possibilities in agriculture. (v7,#1)
Brown, Kathryn, S., "Bright Future--or Brief Flare--For Renewable Energy," *Science* 285(1999):678-680. Solar, wind, and other forms of renewable energy are making surprising gains as some U.S. states open their power markets to competition. But with fossil fuel prices near all-time lows, experts are split on whether alternative energy can maintain its momentum. In a series of articles on "Powering the Next Century" in this issue of *Science*. Also a number of articles and boxes on fuel-efficient and low CO2 automobiles. (v.10,#3)


Brown, L, "New year's revolution why the need for an economy that respects the environment has never been more urgent," *Ecologist* 32(no.1, 2002):26-31. (v.13, #3)

Brown, Les, *Conservation and Practical Morality: Challenges to Education and Reform*. New York: St. Martin's Press, 1988. Pp. ix, 222. An argument against the need for a nonanthropocentric environmental ethic. "The only objects in the moral sphere are human beings and sentient animals" (p. 71). Conservation can be defended on the level of a basic practical morality that considers the promotion of the common good, with an emphasis on the quality of life. Compared to most recent works in environmental philosophy, Brown's book seems reactionary. (Katz, Bibl # 2)


Brown, Lester R. et al, *State of the World 1994*. Washington, DC: Worldwatch Institute, 1994. Paper. $ 10.95. Updated annually, this remains one of the most reliable introductory guides to the world's resources and how they are being used. Used in over 1,000 college and university classes in the United States. (v4,#4)

Brown, Lester R., "Wind Energy Demand Booming: Cost Dropping Below Conventional Sources Marks Key Milestone in U.S. Shift to Renewable Energy," www.earthpolicy.org/Updates/2006/Update52.htm. During the fall of 2005, climbing natural gas prices pulled conventional electricity costs above those of wind-generated electricity in some areas. Examples in Texas and Colorado. In contrast to the East, where people dislike the turbines aesthetically, in the West, with its wide open spaces, ranchers often welcome the turbines, which can add up to $21,000 a year in additional income, and still run cattle on the land. A decade from now, there may be thousands of ranchers who will be earning more selling electricity than they do selling cattle.

with escalating appetites as well as escalating numbers. U.S. population growth contrasts with the situation in other industrial countries such as France, the UK, Germany, Italy, and Japan, where populations are either essentially stable or declining.

Brown, Lester R. et al. *State of the World 1996*. Washington, D.C.: Worldwatch Institute, 1997. $11.95 paper. This is the Worldwatch Institute Report on progress toward a sustainable society and is updated annually. Appearing in 27 languages this has become the world's most widely used public policy analysis in any field. (v8,#2)


Brown, Neville, *The Impact of Climate Change: Some Indications from History, AD 250-1250*. OCEES Research Paper No. 3. Oxford: Oxford Centre for the Environment, Ethics and Society, Mansfield College, 1995. 59 pp. The effects of climate change on human history over the past 2,000 years. Recent developments in the interpretation of ice cores, pollen records and glacial movements, together with the possibility of interpolation using the climatic models now being used to predict the consequences of global warming, have greatly increased the data available for climate and history studies. Nevertheless reconstructions of how climate changes affected the movements of peoples remain speculative. Brown is both a meteorologist and a historian. (v8,#1)


Brown, Peter G., "Greenhouse Economics: Think Before You Count," *The Report from the Institute for Philosophy and Public Policy*, vol. 10, no.3/4, Summer/Fall 1990. "There are some things that are not, and should not be, discounted. No one asks, 'What is the optimal rate of shredding for the U. S. Constitution?'" (v2,#2)
Brown, Peter G., "Climate Change and the Planetary Trust," *Energy Policy*, March 1992, pp. 208-222. Three models of responsibility with respect to climate change: (1) maximizing the present discounted value of consumption; (2) climate change through the lens of the tragedy of the commons; these two are found to rest on implausible assumptions. (3) A model based on a fiduciary trust is more credible, and does not require overly burdensome policies. Brown is Director of Environmental Programs, School of Public Affairs, University of Maryland.


Brown, Rachel. "Righting Ecofeminist Ethics: The Scope and Use of Moral Entitlement." *Environmental Ethics* 26(2004):247-265. Rights have been criticized as incorporating features that are antithetical to ecofeminism: rights are allegedly inherently adversarial; they are based on a conception of the person that fails to reflect women's experience, biased in an illegitimate way toward humans rather than nonhumans, overly formal, and incapable of admitting the importance of emotion in ethics. Such criticisms are founded in misunderstandings of the ways in which rights operate and may be met by an adequate theory of rights. The notions of entitlement and immunity that flow from a conception of rights have great use and potential in environmental ethics. Nonetheless, our understanding of moral rights must be revised in order to realize this potential. The usual attribution of moral rights is structurally arbitrary because obligations arising from others' rights are unjustifiably distinguished from other sorts of obligations for which the same sorts of justificatory bases obtain. Once this arbitrariness is recognized, there remains little reason not to extend a continuous framework of entitlement toward nonhuman animals and nature more generally. Reassessing moral rights according to a basic principle of respect delivers an integrated account of our moral obligations toward one another, and a satisfactory basis from which to account for our diverse obligations toward nonhuman animals and the environment. (EE)


Brown, William P., *The Ethos of the Cosmos: The Genesis of Moral Imagination in the Bible*. Grand Rapids, MI: Eerdmans, 1999. How in the divine drama of the creation, redemption, and consummation of the world, nature, or the earth in its fullness, was understood as a participant in its own right, with its own moral claims.

Brownlee, Christen. AToxin Buster: New Technique Makes Cottonseeds Edible.@ *Science News* Vol. 170, no. 22, Nov. 15, 2006, p. 339. Scientists have engineered cotton plants to produce seeds that are missing a poisonous compound that had previously rendered them inedible. With
the amount of cotton currently planted, much of it grown in developing nations, such modified cottonseeds could fill the daily protein needs of about 500 million people, researchers say. The work was done at Texas A&M.


Bruce, Donald M., "A Social Contract for Biotechnology: Shared Visions for Risky Technologies?" Journal of Agricultural and Environmental Ethics 15(no. 3, 2002):279-289. Future technological developments concerning food, agriculture, and the environment face a gulf of social legitimation from a skeptical public and media, in the wake of the crises of BSE, GM food, and foot and mouth disease in the UK (House of Lords, 2000). Key ethical issues were ignored by the bioindustry, regulators, and the Government, leaving a legacy of distrust. The paper examines agricultural biotechnology in terms of a social contract, whose conditions would have to be fulfilled to gain acceptance of novel applications. Various current and future GM applications are evaluated against these conditions. Success would depend critically on how far a shared vision can be found with the public. To re-establish trust, significant changes are identified in the planning and pursuit of biotechnology. KEY WORDS: accountability, biotechnology, consultation, consumer perceptions, control, environmental risk. ethics, genetic modification, GM animals, GM food, GM crops, nutraceuticals. policy. power, risk. safety, shared vision, social contract, trust, values. Bruce is with the Society, Religion and Technology Project, Church of Scotland, Edinburgh. (JAEE)

Bruce, Donald, "Finding a Balance over Precaution," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):7-16. Three interpretations of the precautionary principle are identified, namely "soft," "hard," and outright rejection. The EC Communication of February 2000 is largely a response to the latter, to provide a legitimation in trade-related WTO disputes. This context leads to an over stress on scientific closure. This is critiqued as idealistic in respect of resolving long term uncertainties inherent in the GM food issue. While offering some useful guidelines in risk management, the EC report seriously fails to take into account the ethical and societal dimension of risk. These are crucial both in determining when precautionary principle is invoked and the action to be taken. The EC view leans too much to a scientific rationalist risk perspective. However, the "Green" interpretation of the precautionary principle as a reversal of the burden of proof is also criticized as inconsistent both with the nature of technology and with the nature of reality as seen in a Christian perspective. Biblical insights on risk reveal a balance of intervention and conservation in a world where risk is inherent. The notion of risk as a social contract reveals that ethical and societal issues have a crucial role to play in applying the precautionary principle.
KEY WORDS: Christianity, EC, Green, precautionary principle, risk assessment, social contract, WTO. Bruce is with the Society, Religion and Technology Project, Church of Scotland. (JAEE)


Bruce, J.; Hoesung, Lee; and Haites, E. Climate Change 1995--Economic and Social Dimensions of Climate Change. New York: Cambridge University Press, 1996. 608 pages. $74.95 cloth, $29.95 paper. This is the contribution of Working Group III to the Second Assessment Report of the Intergovernmental Panel on Climate Change. This work addresses the costs of climate change, both in terms of society and equity issues, and the economic burden of combating adverse climate change. (v7, #3)

Bruch, Carl, Coker, Wole, and VanArsdale, Chris, Constitutional Environmental Law: Giving Force to Fundamental Principles in Africa. Washington, DC: Environmental Law Institute, 2000. (1616 P Street, N.W., Suite 200, Washington, DC 20036. 202/939-3800. Fax: 202/939-3868. E-mail: law@eli.org.) $ 15. Many African countries, often with fairly recent constitutions, have explicit constitutional provisions guaranteeing a clean, healthy environment capable of sustaining human life. But enforcement is a problem, and opportunity. Three different traditions: common law, civil law, and Islamic law. Constitutional freedoms that facilitate environmental rights, such as freedom of association, access to information, and opportunities for public participation. Case studies. "Constitutional environmental provisions, including procedural guarantees, offer some of the best tools for environmental advocates."


Bruegmann, Robert, Sprawl: A Compact History. Chicago: University of Chicago Press, 2005. Sprawl is urban development, a largely beneficial expression of human desires that transcend geography and history. Sprawl should not be feared or cast in a negative light. Bruegmann is in urban planning at the University of Illinois at Chicago.

relations especially in urban settings. Isaiah's prophecies are an artistic-theological history of the city of Jerusalema case study of urban environmental crisis that resulted from a lost sense of covenantal neighborliness. There are alarming parallels in today's urban crises. Ecological degradation, consumerism, and resource depletion are essentially urban problems, and urban power, anxiety, and greed reach into non-urban places to destroy the rural and wild places, as well as to undermine the city's own life support. Bruggeman teaches Old Testament at Columbia Theological Seminary, Decatur, Georgia. (v5,#4)


Brulle, Robert J., Agency, Democracy, and Nature: The U.S. Environmental Movement from a Critical Theory Perspective. Cambridge, MA: MIT Press, 2000. A wide-ranging analysis of environmentally oriented social movements in the U.S., examining their limited effectiveness in realizing their often diverse goals. Environmental movements have often been elitist and must adopt democratic rather than oligarchic institutional structures and develop together an "environmental metanarrative" that can speak effectively in power politics. Often uses the perspective of Habermas. (v.13,#4)


Brune, Martin, Brüne-Cohrs, Ute, and McGrew, William C., "Psychiatric Treatment for Great Apes," Science 306(17 December 2004):2039. A letter to the editor. Captive great apes, especially chimpanzees, suffer from psychiatric disorders homologous to human psychopathology; such conditions are in principle treatable; and our closest relatives in the animal kingdom deserve proper psychiatric treatment. Brüne is at the Center for Psychiatry, Psychotherapy, and Psychosomatics, University of Bochum, Germany.


Brunell, Valerie and Ralph Swain, eds., Wilderness Ranger Cookbook. Helena, Montana: Falcon Press, 1990. Paper. 110 pages. $ 7.95. A collection of backcountry recipes by U.S. Forest Service wilderness rangers, with each recipe accompanied with a philosophical reflection about the meaning of wilderness by one of these rangers. "Wilderness is more than lines on a map. It is also an attitude. This attitude reflects the thought that the earth and its community of life exist for its own sake, as opposed to being for the benefiat of man. Wilderness gives us the opportunity to reflect on the role of humankind as a part of the community of life, rather than as a conqueror of nature." Patricia Cohen, Pecos, NM, with her recipe for "Cous-cous and Veggies." Available from San Juan National Forest Association, P. O. Box 2261, Durango, CO 81302. Phone 303/385-1210. (v4,#4)

Bruner, Michael and Oelschlaeger, Max, "Rhetoric, Environmentalism and Environmental Ethics". Environmental Ethics 16(1994):377-396. The growth of environmental ethics as an academic discipline has not been accompanied by any cultural movement toward sustainability. Indices of ecological degradation steadily increase, and many of the legislative gains made during the 1970s have been lost during the Reagan-Bush anti-environmental revolution. This situation gives rise to questions about the efficacy of ecophilosophical discourse. We argue (1) that these setbacks reflect, on the one hand, the skillful use of rhetorical tools by anti-environmental factions and, on the other, the indifference (even hostility) of the ecophilosophical community toward rhetoric, (2) that since the linguistic turn in philosophy, no rigid line of demarcation can be maintained between rhetoric and philosophy, and (3) that rhetoric offers resources to the ecophilosophical community that increase its potential to effect change in society. Bruner is with the Dept. of Communication Studies, University of North Texas, Denton. Oelschlaeger is with the Dept. of Philosophy, University of North Texas, Denton. (EE)

Brunk, Conrad G., Lawrence Haworth, and Brenda Lee, Value Assumptions in Risk Assessment: A Case Study of the Alachlor Controversy. Waterloo, Ontario: Wilfred Laurier University Press, 1991. Increasing reliance by public policymakers on scientific advisors is motivated in part by an assumption that such advice can be value-free. This study, based on the alachlor pesticide case, shows that risk assessors were divided by the fact that they held differing values, not by differences concerning the purely empirical aspects of the risk assessment. The authors concludes that risk assessment is as much a normative as it is a scientific enterprise. (Thanks to Peter Miller). (v2,#4)


Brunnschweiler, C.N., and E.H. Bulte. A Linking Natural Resources to Slow Growth and More Conflict. @ Science Vol. 320, no. 5876 (2 May 2008): 616-17. Although an abundance of natural resources was generally perceived as advantageous to development until the 1980s, in the 1990s natural resources were often considered a curse. Resource-rich economies often suffer from weak or autocratic leadership, failing institutions, exploitation by wealthier developed states, greedy leaders and rebels, but Brunnschweiler and Bulte claim that natural resources do not necessarily spell doom for development.


Bruno, Kenny and Karliner, Joshua, Earth Summit,biz: The Corporate Takeover of Sustainable Development. Oakland, CA: Foodfirst Books, Institute for Food and Development Policy, 2002. www.foodfirst.org. Phone 510-654-4400. How transnational corporations have coopted the rhetoric of social and environmental responsibility. But there are principles and structures within the United Nations with some potential to counter the World Trade Organization. Alas, however, with the unveiling of the Global Compact in 2000, the U.N. has given corporations the chance to declare their declaration to social and environmental responsibility without actually being held accountable for their actions. (v.13,#4)


Brush, Stephen B., Stabinsky, Doreen, eds. Valuing Local Knowledge: Indigenous People and Intellectual Property Rights. Washington: Island Press, 1996. Cultural or indigenous knowledge should be treated as a form of intellectual property, which enables such peoples to gain financially from sharing unique and useful knowledge, in order to increase economic return from biological resources maintained by peasants and tribal people. Brush is in community studies and development at the University of California, Davis. Stabinsky is in environmental studies at California State University-Sacramento. (v8,#2)


Brussard, Peter F., Dennis D. Murphy, and C. Richard Tracy. "Cattle and Conservation Biology-Another View." Conservation Biology 8 (1994): 919-921. More on a debate in this journal (September 1994, by Reed Noss, editor, and others) on cattle on public lands and the extent of their ecological degradation, mixed here with questions about the extent of advocacy legitimate to conservation biologists. The Society for Conservation Biology "differs from environmental advocacy groups because it promotes science rather than any partisan agenda. If the Society becomes too strident in advocating specific political prescriptions to preserve ecological systems, it may gamble away more than its credibility. It risks losing the opportunity to apply that mission within the broadest possible community of interests. The September 1994 issue of Conservation Biology takes us dangerously close to that state of affairs. ... We obviously can also contribute as activists, but this should be done outside our society." An interesting editorial quite suitable for use in classroom discussions of science and advocacy. Brussard, President of the Society for Conservation Biology, is in biology at the University of Nevada/Reno; Murphy, President-Elect, is in biology at Stanford University, and Tracy is in biology at Colorado State University. (v6,#1)

Brussard, Peter F., and John C. Tull. A Conservation Biology and Four Types of Advocacy. Conservation Biology Vol. 21, no. 1 (2007): 21-4. The four types are (1) professional advocacy, (2) advocacy for science, (3) advocacy for ecosystem services, and (4) advocacy for the natural world.


Bryant, Dirk A. Beyond the Frontier: The Last Wild Forests. Washington, D.C.: World Resource Institute, 1997. 25pp. $14.95 paper. The dramatic decline of original pristine forest and the status of the large remaining tracts. Full-page, full-color maps ranks country by country the perilous state of the world's forests today and provide systematic, easily comparable forestry profiles for Oceania, Asia, Europe and Russia, South America, North and Central Americal and Africa. The work also analyzes threats to the world's remaining forest areas and explains how to reverse these trends. (v8,#1)


Bryant, Tannetje and Akers, Keith, "Environmental Controls in Vietnam." Environmental Law 29(no. 1, 1999):133-. This article examines the post-1992 Vietnamese legislative attempts to protect the environment. It outlines the policy background and governmental administrative framework, gives a detailed analysis of the environmental impact evaluation procedures, analyzes various compliance mechanisms, describes preventative mechanisms of a nonlegal kind, and evaluates the legislation using various legal and nonlegal criteria. (v.11,#1)


Buarque, Cristovam, The End of Economics: Ethics and the Disorder of Progress. London: Zed Books, 1993. , 29.95 cloth, , 12.95 paper. Economics aspiration to neutrality has faded, it inadequately figures environmental costs, its utilitarian spectacles blind it to qualitative distinctions of value. A new economics needs to embody an analytic framework that has an explicit ethical posture. The >telos' implied within the dominant view of development is essentially a Western construct and does not articulate the vision or meet the needs of the majority of people in the South; traditional views are cyclic, not developmental. (v5,#3)

Bube, Richard H. "Is 'Man' Unique?", Perspectives on Science and Christian Faith 48(no.4,1996):250. (v7,#4)


Buchanan, Allen. "Judging the Past: The Case of the Human Radiation Experiments." *The Hastings Center Report* 26(May 1996):25. Our reluctance to measure the morality of past practices is more than a nagging problem for moral theorists. The legitimacy of retrospective moral judgment has fundamental implications for how practices and institutions should be viewed, and judged, now. (v7,#2)

Buchanan, James M. *Ethics and Economic Progress*. Norman: University of Oklahoma Press, 1994. 168 pages. $19.95. From a lecture series at the University of Oklahoma. The Nobel Prize-winning economist and professor at George Mason University gives a non-technical examination of the ethics-economics nexus, and argues that moral constraints exert important economic effects, such as, the "Puritan" work and saving ethics, the relevance of moral values to economic well-being. Buchanan defends Adam Smith's widely dismissed distinction between productive and nonproductive labor. (v5,#2)

Buchanan, Patrick, *The Great Betrayal: How American Sovereignty and Social Justice Are Being Sacrificed to the Gods of the Global Economy*. Little, Brown. Reviewed by Cobb, John B., Jr., in "Against Free Trade: A Meeting of Opposites," *Christian Century* 115 (no. 29, October 28, 1998):999-1002. Cobb is against free trade because of what it does to third-world labor and the environment; Buchanan is against free trade because it undermines American justice and national sovereignty. But liberal and conservative meet surprisingly. "The real divisions of our time are not between left and right but between nations and the globalist delusion." "America's wealthiest 1 percent, which controlled 21 percent of America's wealth in 1949, now [1995] controls 40 percent. ... Top CEO salaries--44 times the average wage of a worker in 1965--have soared to 212 times." Is there a way to combine economic nationalism and a wider loyalty to Earth and all its people? (v.9,#4)

Buchanan, Rob, "A Natural Death," *Outside*, vol, 25, no. 6, June 2000, pages 106-114, 152-155. Guy Waterman and his wife authored four books on ethics and conservation of New England wilderness. On February 25, 2000, the coldest day of the year, Waterman, hiked to the top of his favorite peak, Mt. Lafayette (Vermont), and laid down to die by freezing. His body was recovered days later. Gripped by pessimism, Waterman became convinced that the "illusion of wilderness is as crucial as wildness itself." (v.11,#2)

Buchholz, Rogene A., "Corporate Responsibility and the Good Society: From Economics to Ecology," *Business Horizons* (Indiana University Graduate School of Business) 34, no. 4 (1991):19-31. The economic paradigm will continue its dominance as long as human beings consider themselves to be the center of life on earth. (v4,#2)

species decimation, and coastal erosion and wetlands destruction. Part III analyzes strategies for
business and strategies for society. Buchholz is in the College of Business Administration,
Loyola University of New Orleans. (v3,#3)

Press, 1996. More than 60 kinds of bird and mammal pollinators are known to be endangered
and no one has any idea how many insect pollinators are vulnerable to extinction. Honey bees
are a doubtful substitute; there are now far fewer honeybees in the U.S. than at any time since
World War II, owing to infestations with exotic diseases and pests that are not easily controlled.
Within a few years pollinators other than honeybees will be needed to provide $ 4 billion to $ 6
billion of annual crop pollination service to America's farmers. (v7,#1)

$50 cloth, $25 paper. 240 pp. (v9,#2)

Buckingham-Hatfield, S., Evans, B. Environmental Planning and Sustainability. Chichester,
U.K.: John Wiley and Sons, 1996. 196 pp., 35, cloth. The authors argue that national
environmental planning is reactive, ad hoc, and hence they call for a wider-ranging refocusing,
so that environmental planning can be based on reliable and consistent data collection, equitable
public participation, and well-debated understanding of sustainability. They also argue that the
challenge offered by the U.N. through its Agenda 21 program and by European policies should
result in a rethinking, not only concerned with how we plan to achieve environmental
sustainability, but also about the contexts in which we should do so. (v8,#2)

Buckley, Claire, compiler, Case Studies in Environmental Management in Central and Eastern
(INEM), with the support of the German Federal Foundation for the Environment, Deutsche
Bundesstiftung Umwelt. October 1999. 144 pp., paper. ISBN 1 874719 20 9. $ 30.00, As
Central and Eastern European countries queue up to become members of a widely expanded
European Union (EU), the question of how their environmental laws and performance can
become consistent with current standards has become of paramount importance. Forecasts are
largely gloomy, with some commentators suggesting that it will take decades for full compliance
to be achieved. This casebook presents the experiences of fourteen companies in integrating
environmental considerations into these emerging economies. Contact: Samantha Self,
Greenleaf Publishing, Aizlewood Business Centre, Aizlewood's Mill, Sheffield S3 8GG, UK.
E-mail: greenleaf@worldscope.co.uk
http://www.greenleaf-publishing.com. (v.10,#3)

Buckley, G. P., ed., Biological Habitat Reconstruction. Belhaven, 1989. $52.50. (v3,#1)

Buckley, Ralf et al, eds., Nature-Based Tourism, Environment and Land Management. New

Buckley, Ralf, ed., Environmental Impacts of Ecotourism. New York: Oxford University Press,
2004. Buckley is at Griffith University, Australia.

Budd, Malcolm, "The Aesthetics of Nature," Proceedings of the Aristotelian Society 100(2000):137-157. I begin by demonstrating the inadequacy of the idea that the aesthetic appreciation of nature should be understood as the appreciation of nature as if it were art. This leads to a consideration of three theses: (i) from the aesthetic point of view natural items should be appreciated under concepts of the natural things or phenomena they are, (ii) what aesthetic properties a natural item really possesses is determined by the right categories of nature to experience the item as falling under, and (iii) (the doctrine of positive aesthetics with respect to nature) the natural world untouched by humanity is essentially aesthetically good. I indicate an unclarity in (i) and identify difficulties facing (ii). I distinguish various versions of (iii), reject certain of these, and fault a number of arguments in support of (iii). I conclude that the idea of the aesthetic value of a natural item is such that it endows the aesthetic appreciation of nature with a freedom and relativity denied to the appreciation of art and renders (iii) problematic. With criticisms of Allen Carlson and Holmes Rolston. (v.13,#4)


Part II. This part elucidates and defends Kant's claim that a pure judgment of taste does not, of itself, generate an interest, before considering, and rejecting as unconvincing, Kant's arguments for his views that (i) someone who takes an immediate interest in natural beauty can do so only in virtue of possessing the basis of a morally good disposition, (ii) someone who reflects on nature's beauty will inevitably take an immediate interest in natural beauty, and (iii) each person ought to take such an interest.

Part III. This part expounds Kant's conception of a judgment of the sublime in nature, elucidates his accounts of the mathematically and the dynamically sublime, rejects his account of the emotion of the sublime and presents an alternative. Budd is in philosophy at University College London. (v.13,#4)


King, Steven Rockefeller, and Donald K. Swearer. The Boston Research Center for the 21st Century is an international peace institute founded in 1993 by Daisaku Ikeda, a Buddhist peace activist and President of Soka Gakkai International, an association of Buddhist organizations in 128 countries. Address: 396 Harvard Street, Cambridge, MA 02138-3924. Phone 617/491-1090. Fax 617/491-1169. (v9,#2)

Budiansky, Stephen, *Nature's Keepers: The New Science of Nature Management*. Free Press, 1995. Nature doesn't take care of itself, but needs some management. Wild nature is "a fake" not only now but has been a fake for centuries; there is nothing but human modified nature, "the work of civilized man" (p. 3) "Nature lovers ... have deceived themselves about the true character of their beloved" (p. 5). Even ecologists now realize that nature does not take care of itself well (pp. 6-7). "Perhaps the best model for us to follow is that of the gardener, who ... handles nature with respect but without self-abnegation. He brings the full scope of human aptitudes to bear on the landscape, aesthetic, scientific, utilitarian, even moral; he knows that what he is fashioning his creativity and wisdom; but he knows in the end that the effort is a joint one" (p. 250). Critics of Budiansky are complaining that he uses evidence selectively and often fails to give a balanced representation of those he cites, for example, using Donald Worster as an advocate of balance in nature (p. 17), when Worster in fact argues much the opposite. Budiansky is a senior writer at *U.S. News and World Report*. (v7,#2)

Budiansky, Stephen, "Killing with Kindness," *U.S. News and World Report* 121(no. 21, Nov. 25, 1996):48-49. Preserving wildlife has been a moral and practical disaster for the developing world. The paradoxical solution: Use it or lose it. Tourism is no answer. Elephants, for instance, are the darling of the West and enemy number 1 to Africans. (v7,#4)

Budiansky, Stephen, "The Doomsday Myths," *U.S. News and World Report*, December 13, 1993. By exaggerating environmental dangers, activists have undermined their credibility, and triggered an anti-environmental backlash. None of the global environmental issues now under attack is a hoax. But by overstating evidence, by presenting hypotheses as certainties, and predictions as facts to create a sense of urgency, scientist-activists have overplayed their hand. Myth One: Fifty thousand species a year are being lost to extinction. Myth Two: Forth million acres of tropic rain forest are destroyed each year. Myth Three: The ozone hole is spreading. Myth Four: No serious scientist doubt predictions of global warming. Budiansky is a senior writer at *U.S. News and World Report*. (v5,#1)

Budiansky, Stephen, "A Special Relationship: The Coevolution of Human Beings and Domesticated Animals," *Journal of the American Veterinary Medical Association* 204 (no. 3, February 1994):365-368. Domestication represents a coevolved relationship, analogous with many other mutualistic partnerships in nature, in which loss of defensive and self-sufficient behaviors in a species is more than compensated for by the gain of food, protection, or shelter afforded by close association with another species. This is supported by recent scientific studies, and this undermines the idea that domestication of animals is tantamount to their subjugation or exploitation. Some species--dogs, cats, cattle, house mice, Norway rats, even gourds--have survived by their association with humans. The fittest strategy of the future may be a system of more cooperative, interdependent relationships between such somewhat tamed animals and
humans, not an emphasis on those wild and free, untainted by human touch. Lions have been outcompeted by house cats. (v5,#1)


Buege, Douglas J., "The Ecologically Noble Savage Revisited," Environmental Ethics 18(1996):88. The stereotype of the 'ecologically noble savage' is still prevalent in European-American discourses. I examine the empirical justifications offered for this stereotype, concluding that we lack sound empirical grounds for believing in 'ecological nobility.' I argue that the stereotype should be abandoned because it has negative consequences for native peoples. Instead of accepting questionable stereotypes, philosophers and others should focus on the lives of particular peoples in order to understand their philosophies as well as the relationships that they maintain with their homelands. Buege is a philosopher in West Allis, WI and has taught at the University of Wisconsin--Stevens Point. (EE)


Buege, Douglas J., "An Ecologically-informed Ontology for Environmental Ethics," Biology and Philosophy 12(1997):1-20. Since the inception of their subject as a distinct area of study in philosophy, environmental ethicists have quarreled over the choice of entities with which an environmental ethic should be concerned. A dichotomous ontology has arisen with the ethical atomists, e.g. Singer and Taylor, arguing for moral consideration of individual organisms and the holists, e.g. Rolston and Callicott, focussing on moral consideration of systems. This dichotomous view is ecologically misinformed and should be abandoned. In this paper, I argue that the organization of the natural world, as viewed by some ecologists and evolutionary biologists, is structured on various levels that are not reducible to one another. This "hierarchical" view, expressed by Salthe and Eldredge, provides the most complete and accurate ontology for environmental ethics. Buege completed a Ph.D. in environmental ethics at the University of Minnesota, Minneapolis, fall 1993, entitled Intrinsic Value, Organic Unity and Environmental Philosophy: Grounding our Values, critiquing existing theories and developing new theories of ontology and intrinsic value with a view to grounding public policy issues. The dissertation advisor was Arthur Caplan, and Karen Warren, of Macalaster College, St. Paul, was a chief mentor. He is now an independent scholar, West Allis, WI. (v8,#3)

Buell, Lawrence. The Future of Environmental Criticism: Environmental Crisis and Literary Imagination. Malden, MA: Blackwell Publishing, 2005. Ecocriticism is an umbrella term used to refer to the environmentally oriented study of literature and (less often) the arts more generally, and to the theories that underlie such critical practice@ (p. 138). Buell traces the ecocritical movement back to its roots in the 1970s to its proliferation and diversification today.
He shows how ecocriticism has moved from the genres of nature writing and nature poetry to all of literary history and discourse, and he addresses issues such as the ecocriticism move from nature preservation to environmental justice, the meaning of place in a globalizing world, and the interaction of ecocritical aesthetic, ethical, and political concerns. Buell concludes by arguing that the discourses of the environment will become a permanent part of literary and cultural studies.

Buell, Lawrence. *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination*. Malden, MA: Blackwell Publishing, 2005. Ecocriticism is an umbrella term used to refer to the environmentally oriented study of literature and (less often) the arts more generally, and to the theories that underlie such critical practice (p. 138). Buell traces the ecocritical movement back to its roots in the 1970s to its proliferation and diversification today. He shows how ecocriticism has moved from the genres of nature writing and nature poetry to all of literary history and discourse, and he addresses issues such as the ecocriticism move from nature preservation to environmental justice, the meaning of place in a globalizing world, and the interaction of ecocritical aesthetic, ethical, and political concerns. Buell concludes by arguing that the discourses of the environment will become a permanent part of literary and cultural studies.


Bugallo, Alicia Irene, )Antropocentrismo débil en las nuevas prácticas de conservación? ('Weak Anthropocentrism in New Conservation Practices?'). Acts of the "I Ibero-American Congress on Ethics and Political Philosophy" Alcalá de Henares, 16-20 September 2002, Spain. CD-ROM forthcoming. In Spanish.) Following Norton's idea of weak anthropocentrism, referred to by other authors as wise or humble anthropocentrism, the article describes the evolution of a conflict in the Argentinian part of the Yunga's Forest system, caused by the construction of a gas duct. The conflict includes several agents, namely the native communities, private companies, governmental and no governemental entities. Bugallo stresses the recent approval by the UNESCO of a Biosphere Reserve in the area, after the proposal made by a scientific team.

ideas of Biosphere Reserves, changes in ideas about core and buffer areas, and the failure appropriately to integrate preservation and human development in Latin American and the Caribbean. She is in philosophy at the Universidad Tecnologica Nacional, Buenos Aires, bugallo@mail.retina.ar. (v.13,#1)

Bugallo, Alicia Irene, AAbordajes de la problemática ambiental en la Argentina, desde la perspectiva de la ética y la filosofía ambiental, @ International Society for Environmental Ethics Newsletter 19, no.1, Winter 2008, pp. 5-8. English translation: AApproaches to the Environmental Problem in Argentina from the Perspective of Environmental Ethics and Philosophy, @ pp. 8-11. Bugallo is a Ph.D. Philosophy candidate, University of Buenos Aires, Argentina. She works as a Professor at the National Technological University, Buenos Aires, and as an Adjunct Professor at El Salvador University, San Miguel, Argentina. Online at: http://www.cep.unt.edu/ISEE/index.htm.

Bugnion, Veronique, Reiner, David M., "A Game of Climate Chicken: Can EPA Regulate Greenhouse Gases Before the U.S. Senate Ratifies the Kyoto Protocol?" Environmental law 30(no. 3, 2000):491-. Bugnion and Reiner explore the various scientific, political, and legal debates regarding the action necessary to reverse the negative effects of global warming. They also discuss the United States Environmental Protection Agency's (EPA) ability to use provisions of the Clean Air Act (CAA) to promulgate and implement emissions standards addressed by the Kyoto Protocol. Finally, the authors conclude that, although EPA's authority to implement such standards is unclear, Congress could amend the CAA to explicitly authorize EPA to promulgate standards for limiting greenhouse gas emissions. (v.12,#2)

Buhl, Lawrence, Environmental Imagination, 1995. (v7,#2)


Buhrs, Ton, and Bartlett, Robert V., "Strategic Thinking and the Environment: Planning the Future in New Zealand," Environmental Politics (Summer 1997):72-. (v.8,#4)

Buhrs, Ton, "Green Planning in Australia and Canada: Dead or Alive?" Environmental Politics 9(no. 2, Summer 2000):102-. (v.12,#2)


Buitendag, J 1986. Die skepping as gelykenis: 'n beoordeling van die skeppingsleer van Karl Barth in die lig van die appéê van die ekologiese krisis. Hervormde Teologiese Studies 42:4, 674-95. (Africa)


Bulbeck, Chilla. Facing the Wild: Ecotourism, Conservation and Animal Encounters. London: Earthscan, 2005. Bulbeck discusses why people travel to see animals, the authenticity of such experiences, and what changes in behavior follow, especially with regard to conservation. She argues for a respectful stewardship of a hybrid nature.

Bulkeley, Harriet, and Mol, Arthur P.J., "Participation and Environmental Governance: Consensus, Ambivalence and Debate," Environmental Values 12(2003): 143-154. During the past four decades the governance of environmental problems - the definition of issues and their political and practical resolution - has evolved to include a wider range of stakeholders in more extensive open discussions. In the introduction to this issue of Environmental Values on 'Environment, Policy and Participation', we outline some features of these recent developments in participatory environmental governance, indicate some key questions that arise, and give an overview of the collection papers in this special issue. (EV)

Bulkley, Kelly. "The Quest for Transformational Experience." Environmental Ethics 13(1991) 151-63. Michael E. Zimmerman claims that the fundamental source of our society's destructive environmental practices is our "dualistic consciousness," our tendency to see ourselves as essentially separate from the rest of the world; he argues that only by means of the transformational experience of nondualistic consciousness can we develop a more life-enhancing environmental ethic. I suggest that dreams and dream interpretation may provide exactly this sort of experience. Dreams present us with powerful challenges to the ordinary categories and structures of our daily lives, and they reveal in numinous, transformational images how we are ultimately members of a web of being that includes all life. I offer Victor Turner's concept of communitas as a means of clarifying and unifying the issues Zimmerman and I are discussing. In conclusion I sketch out some of the practical applications of these ideas to the task of improving our society's treatment of the environment. Bulkley is a Ph.D. student at the Divinity School of the University of Chicago, Chicago, IL. (EE)

Bullard, Robert D., ed., *Confronting Environmental Racism: Voices from the Grassroots*. Boston, MA: South End Press (116 Saint Botolph St., Boston, MA 02115), 1993. A book by and about people of color fighting America's environmental racism, from the Indian reservations to the inner cities. "Whether by conscious design or institutional neglect, communities of color face some of the worst environmental destruction in the nation. Now activists of color have begun to challenge both the industrial polluters and the often indifferent mainstream environmental movement. Groups have sprung up from Maine to Louisiana to Alaska." This book tells their story. (v4,#3)


Bullard, Robert D., *Dumping in Dixie: Race, Class, and Environmental Quality*. Boulder, CO: Westview Press, 1994, 2nd edition. 192 pages. $19.95 paper. To be poor, working class, or a member of a minority group in the U.S. often means being subjected to a disproportionate share of the country's environmental problems. How five African-American communities, empowered by the civil rights movement, link environmentalism with social justice. The second edition updates this struggle. Bullard is a sociologist at the University of California, Riverside. (v5,#1)

Bullard, Robert D., ed. *The Quest for Environmental Justice: Human Rights and the Politics of Pollution*. San Francisco: Sierra Club Books, 2005. Contents include: (1) AEnvironmental Justice in the Twenty-first Century@ by Robert D. Bullard, (2) ANeighborhoods >Zoned= for Garbage@ by Robert D. Bullard, (3) AWoman Warriors of Color on the Front Line@ by Robert D. Bullard and Damu Smith, (4) ALiving and Dying in Louisiana=s >Cancer Alley= by Beverly Wright, (5) AEnvironmental Inequity in Metropolitan Los Angeles@ by Manuel Pastor Jr., James L. Sadd, and Rachel Morello-Frosch, (6) AToxic Racism on a New Jersey Waterfront@ by Olga Pomar, (7) AAnatomy of the Urban Parks Movement: Equal Justice, Democracy, and Livability in Los Angeles@ by Robert García and Erica S. Flores, (7) AResource Wars against Native Peoples@ by Al Gedicks, (9) Tierra y Vida: Chicano Environmental Justice Struggles in the Southwest@ by Devon G. Peña, (10) AEnvironmental Reparations@ by Robin Morris Collin and Robert Collin, (11) AVieques: The Land, the People, the Struggle, the Future@ by Déborah Berman Santana, (12) AAlienation and Militancy in the Niger Delta: Petroleum, Politics, and Democracy in Nigeria@ by Oronto Douglas, Dimieari von Kemedi, Ike Okonta, and Michael J. Watts, (13) AEnvironmental Racism and Neoliberal Disorder in South Africa@ by David K. McDonald, and (14) AAddressing Global Poverty, Pollution, and Human Rights@ by Robert D. Bullard, Glenn S. Johnson, and Angel O. Torres.

Bullard, Robert D., ed. *The Quest for Environmental Justice: Human Rights and the Politics of Pollution*. San Francisco: Sierra Club Books, 2005. Contents include: (1) AEnvironmental Justice in the Twenty-first Century@ by Robert D. Bullard, (2) ANeighborhoods >Zoned= for Garbage@ by Robert D. Bullard, (3) AWoman Warriors of Color on the Front Line@ by Robert D. Bullard and Damu Smith, (4) ALiving and Dying in Louisiana=s >Cancer Alley= by Beverly Wright, (5) AEnvironmental Inequity in Metropolitan Los Angeles@ by Manuel Pastor Jr., James L. Sadd, and Rachel Morello-Frosch, (6) AToxic Racism on a New Jersey Waterfront@ by Olga Pomar, (7) AAnatomy of the Urban Parks Movement: Equal Justice,
Democracy, and Livability in Los Angeles@ by Robert García and Erica S. Flores, (7)
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Environmental Justice Struggles in the Southwest@ by Devon G. Peña, (10) AEnvironmental Reparations@ by Robin Morris Collin and Robert Collin, (11) AVieques: The Land, the People, the Struggle, the Future@ by Déborah Berman Santana, (12) AAlienation and Militancy in the Niger Delta: Petroleum, Politics, and Democracy in Nigeria@ by Oronto Douglas, Dimieari von Kemedi, Ike Okonta, and Michael J. Watts, (13) AEnvironmental Racism and Neoliberal Disorder in South Africa@ by David K. McDonald, and (14) AAddressing Global Poverty, Pollution, and Human Rights@ by Robert D. Bullard, Glenn S. Johnson, and Angel O. Torres.

Bullard, Robert D., People of Color Environmental Groups: Directory, 1992. 81 pages. There are over 200 such groups in the United States, described here. Contact: Robert D. Bullard, Department of Sociology, University of California, Riverside, CA 92521. Phone 714/787-5444. (v3,#1)


Bulliet, Richard W. Hunters, Herders, and Hamburger: The Past and Future of Human-Animal Relationships. New York: Columbia University Press, 2005. Bulliet explores four stages in the history the human-animal relationship: separation, predomesticity, domesticity, and postdomesticity. He begins with the question of when and why humans began to consider themselves distinct from other species and concludes with the human use of species as raw materials for various animal-product industries. He discusses changing philosophical, religious, and aesthetic viewpoints, as well as different ways various cultures have reinforced, symbolized, and rationalized their relations with animals.

Bulliet, Richard W. Hunters, Herders, and Hamburger: The Past and Future of Human-Animal Relationships. New York: Columbia University Press, 2005. Bulliet explores four stages in the history the human-animal relationship: separation, predomesticity, domesticity, and postdomesticity. He begins with the question of when and why humans began to consider themselves distinct from other species and concludes with the human use of species as raw materials for various animal-product industries. He discusses changing philosophical, religious, and aesthetic viewpoints, as well as different ways various cultures have reinforced, symbolized, and rationalized their relations with animals.


Bulte, Erwin and Van Kooten, G. C., "Economic Science, Endangered Species, and Biodiversity Loss," Conservation Biology 14(2000):113-119. Although economist increasingly attempt to justify preservation of biological assets on economic grounds, we argue that this might be a
dangerous approach to take. Economics will not always justify the saving of species. Studies in harvesting tropical rainforests, and the minke whale. Ultimately it may be necessary to reexamine the ethical foundations for conservation of nature and biodiversity, including the economist's use of utilitarianism. The safe minimum standard may be useful in practice. Bulte is in economics, Tilburg University, The Netherlands. Van Kooten is in agricultural economics, University of British Columbia, Vancouver. (v.11,#3)


Bunce, M, "Agriculture and environmental sustainability in the countryside," Land Use Policy 19(no.2, 2002):190-. (v.13, #3)


Bunyard, Peter, "Fiddling while the climate burns.," The Ecologist, 30 (No. 2, 2000 Apr 01): 48-. Bunyard reveals the likely changes in climate if we do not change our ways. (v.11,#4)

Bunyard, Peter, "Crisis? What crisis?," The Ecologist 30(no.7, OCT 01 2000):56-. According to an ex-founder of Greenpeace, the Amazon rainforest has never been in better shape. Peter Bunyard exposes this dangerous greenwash for what it is. (EE v.12,#1)

Bunyard, Peter, "Climate debate heats up," The Ecologist 30(no.7, OCT 01 2000):48-. Science editor Peter Bunyard looks at an important new report on responses to climate change in the UK. (EE v.12,#1)

Bunyard, Peter. "Industrial Agriculture--Driving Climate Change," The Ecologist 26(no.6, 1996):290. Climate change is happening--that's official. Nonetheless, most agronomists argue that human societies can weather the storm without drastic changes to industrialized patterns of farming. Such claims, however, overestimate industry's contribution to climate change and underplay the impact of modern agriculture on climate. By degrading soils and changing patterns of land use, agriculture is disrupting the ability of climate to recover from the perturbations caused by greenhouse gas emissions. The change in rainfall patterns that accompany land degradation, especially in the drylands, is leading to increased water stress and, consequently, towards conditions where terrestrial vegetation may be losing its powers to modulate climate and thus prevent runaway global warming. (v8,#2)

Burch, David, and Rickson, Roy E., eds. Globalization and Agri-Food Restructuring: Perspectives from the Australasia Region. Brookfield, VT: Ashgate, 1996. 366pp. $76.95
hardback. Contains 18 original papers which focus on the causes of agricultural transformation in the Australasia region, including the social and environmental impacts that result when transnational corporations restructure agrifood systems at the local, the regional, and the national and global level. (v8,#1)


Burdeick, Alan, "The Truth about Invasive Species," Discover 26(no. 5, May 2005):35-41. "How to stop worrying and learn to love ecological intruders." "Alien species do pose a threat. But their real crime isn't against nature; it's against us and our self-serving ideas of what nature is supposed to be" (p. 36). "Invasion is not a zero-sum game, with invaders replacing natives at a one-to-one (or a one-to-two, or more) ratio. Rather, and with critical exceptions, it is a sum-sum game, in which ecosystems can accept more and more species" (p. 38). "Alien" species are not "invaders," we should drop that vocabulary. They are "introduced," and "ours," we brought them with us, like corn and cattle. The increase biodiversity. "By and large, most [introduced] species have no visible impact. They blend in. They live happily among us--on our lawns, under our homes--and we, it seems, live happily among them," "Invasions don't weaken ecosystems--they simply transform them into different ecosystems" (p. 40). They are nature too, still very much with us. Burdick seems to have unlimited capacity to enjoy his weedy world.


Burgat, Florence, "Non-violence towards Animals in the Thinking of Gandhi: The Problem of Animal Husbandry," Journal of Agricultural and Environmental Ethics 17(2004):223-248. The question of the imperatives induced by the Gandhian concept of non-violence towards animals is an issue that has been neglected by specialists on the thinking of the Mahatma. The aim of this article is to highlight the systematic - and significant - character of this particular aspect of his views on non-violence. The first part introduces the theoretical foundations of the duty of non-violence towards animals in general. Gandhi's critical interpretation of cow-protection, advocated by Hinduism, leads to a general reflection on the duty of non-violence towards animals, the cow being transformed into the representative of all "dumb creation." The approach adopted by Gandhi to solving the problem of cow-protection focuses on its practical dimensions and is based primarily on reforming animal husbandry. What limits should be imposed on the exploitation of farm animals within the framework of non-violence? Gandhi devoted nearly 30 years to elaborating an animal husbandry system that would be both economically viable and in conformity with the universal ethical principles he drew from religions (especially Hinduism). The interdiction to kill is absolute, since Gandhi not only rejects the breeding of farm animals for the purposes of butchery but also the slaughtering of animals that are no longer capable of providing the services required of them. He therefore concentrated his efforts on drawing up a scheme to reorganize this activity on a national scale while taking into consideration these constraints, which are less contradictory than they may seem to be at first sight. Reviewing the age-old activity of animal husbandry in the light of non-violence is clearly based on the specific nature of Hindu traditions. However, it goes far beyond cultural or religious relativism, since it is also founded on universal ethical principles. Keywords: ethics, farm animals, Gandhi, non-violence. The author is at INRA-TSV 65, Boulevard de Brandebourg, 94205 Ivry-sur-Seine, France. (JAEE)

Burger, J., Niles, L., Clark, K.E. "Importance of Beach, Mudflat and Marsh Habitats to Migrant Shorebirds on Delaware Bay," Biological Conservation 79(no.2/3 1997):283.


Burger, Joanna. Oil Spills. New Brunswick, NJ: Rutgers University Press, 1997. 208pp. $29.95 cloth. The first book to survey the history of oil spills, the problems they create, the types of clean-ups and their efficacy, the legal, social, economic, and ecological consequences of oil spills, their long-term impacts on the wildlife and people who survive them, and the alternatives to oil and its transport. (v7,#4)


Burkett, Paul., "The Value Problem in Ecological Economics: Lessons from the Physiocrats and Marx", *Organization and Environment*, 16, (No. 2, 2003):137-67. Examines the disputed ecological economics question of whether nature is a direct source and/or substance of value. One group of protagonists ascribes value directly to natural resources and argues that monetary exchange values (prices and profits) largely or fully represent the values extracted from nature, whilst another group focuses on nature as an objective condition or basis for value defined as psychic income or "enjoyment of life". The paper applies Marx's critique of the Physiocrats to this contemporary debate, suggesting that both groups of ecological economists do not adequately consider the relations between use value and capitalist valuation. Burkett is in economics at Indiana State University, Terre Haute. (v 14, # 3)

Burkhardt, Jeffrey, "Crisis, Argument, and Agriculture", Journal of Agricultural Ethics 1(1988):123-138. This paper analyzes the use of "social crisis" as applied to the state of modern agriculture and, by extension, other "crises" such as those in legitimation and morality. The crisis we may be facing with respect to agriculture is more properly understood as a sociopolitical crisis that has broader implications than simply the loss of farms or traditional farming values. Burkhardt is in ethics and policy studies in agriculture and natural resources at the University of Florida, Gainesville.

Burkhardt, Jeffrey, "The Morality Behind Sustainability", Journal of Agricultural Ethics 2(1989):113-128. This article discusses the arguments that can be advanced for sustaining anything and initially concludes that our obligations to future generations entail sustaining more than just sufficient food production or an adequate resource base. Indeed, a tradition of care and community must underlie whatever agricultural and resource strategies we are to develop under the rubric of sustainability. Burkhardt is in ethics and policy studies in agriculture and natural resources at the University of Florida, Gainesville.


Burnett, G. W., and Kamuyu wa Kang'ethe, "Wilderness and the Bantu Mind." Environmental Ethics 16(1994):145-160. In the West, it is widely believed that, since Africans lack an emotional experience with romanticism and transcendentalism, they do not possess the philosophical prerequisites necessary to protect wilderness. However, the West's disdain for African systems of thought has precluded examination of customary African views of wilderness. Examination of ethnographic reports on Kenya's Highland Bantu reveals a complex view of phenomena that the West generally associates with wilderness. For the Bantu, wilderness is an extension of human living space, and through concerted social action rather than individual initiative, it is, or at least can be, dominated by society. Wildlife is unnatural and alienated from human society, which is natural. Because wilderness is, consequently, understood to be fearsome and hostile, it is not a place that can provide inspiration or self-actualization. Almost all forests
have a special spiritual relationship with humankind, and some trees have a special relationship
with God. Although traditional Bantu thought is contrary to a concept of wilderness as
conserved, managed space filled with tourists and recreators, it does embrace a concept of
wilderness as wildlands. The Bantu have gone to considerable length to develop an approach to
wilderness that minimizes individual contact while requiring association with wilderness as a
social activity. Population growth and want of vocational opportunities continue to thrust
Highland Bantu into wilderness as a fundamental and traditional survival technique. Burnett is
in Parks, Recreation and Tourism, Clemson, SC; Kang’ethe is in sociology and religion, Cardinal
Stritch College, Milwaukee, and formerly of Nairobi, Kenya. (EE)

Burnett, G. W. and Lisa M. Butler Harrington, "Early National Park Adoption in Sub-Saharan
Africa," Society and Natural Resources 7(1994):155-168. National parks are widely thought to
have begun in Yellowstone National Park in the U.S. in 1872 and to have spread around the
world from that inspiration. But parks were adopted early in southern Africa and spread rapidly
through much of sub-Saharan Africa. The earliest preservation activities were oriented toward
watershed protection and erosion control in fynbos areas. The game reserve orientation of some
parks originated later. Burnett is in recreation and tourism at Clemson University, Harrington in
gleology/geography at Eastern Illinois University. (v5,#4)

Burnett, G. W., and Kamuyu wa Kang'ethe, "Wilderness and the Bantu Mind." Environmental
Ethics 16(1994):145-160. In the West, it is widely believed that, since Africans lack an
emotional experience with romanticism and transcendentalism, they do not possess the
philosophical prerequisites necessary to protect wilderness. However, the West's disdain for
African systems of thought has precluded examination of customary African views of
wilderness. Examination of ethnographic reports on Kenya's Highland Bantu reveals a complex
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Stritch College, Milwaukee, and formerly of Nairobi, Kenya. (EE)

Burnett, G.W.; Joulie-Kuttner, Regine; and wa Kang'ethe, Kamuyu. "A Willing Benefactor: An
Essay on Wilderness in Nilotic and Bantu Culture." Society and Natural Resources 9, no.2
(1996): 201. (v7, #3)

Burnett, H. Sterling, Review of Dizard, Jan E. Going Wild: Hunting, Animal Rights, and the


Burney, Jonathan. "Is Valuing Nature Contributing to Policy Development?" *Environmental Values* 9(2000):511-528. Abstract: This paper examines technical, ethical and ecological science perspectives on environmental valuation, and discusses problems in terms of the implications for practical policy-making. It suggests that all these perspectives raise legitimate concerns about the use of stated preference methods, but concludes that such methods still have a role to play in policy making for nature conservation provided they are applied in the right circumstances, designed very carefully, and used in conjunction with other decision-making tools. Keywords: Nature, biodiversity valuation, ecosystem functions, cost-benefit. Jonathan Burney resides at English Nature, Northminster House, Peterborough PE1 1UA, UK. (EV)

Burnham, Neal. "More Damnation in Quebec," *Alternatives* 24(no. 2, spring 1998):5-. Hydro-Quebec plans to divert eight more rivers to generate additional electricity for the US. (v.9,#2)

Burnham, Philip. *Indian Country, God's Country: Native Americans and the National Parks*. Covelo, CA: Island Press, 2000. 352 pages. $27.50. The complex relationship between Native Americans and the national parks, relating how Indians were removed, relocated, or otherwise kept at arm's length from lands that became some of our nation's most hallowed ground. (v.11,#4)


Burnley, I. H., "Population and Environment in Australia: Issues in the Next Half Century," *Australian Geographer* 34(no. 3, 2003):267-280. Varying sets of environmental ethics and values considered in relation to Australia's global responsibilities and commitments. An increase in population to 26 million by 2050 will not place severe stresses on the physical environment, provided that environmental and resource management strategies are put firmly in place, and if consumption and resource use practices are significantly modified. The environmental perspective that rejects growth and diversity among humans while embracing environmental conservation is an inward-looking nationalism/environmentalism that is harmful both to Australia's moral integrity as a nation, and in local and world citizenship. Australia is in a position to receive quite a number of refugees from other, degrading nations. Burnley is in geography, University of New South Wales, Sydney, Australia.

Burns, Kelly A., AWarren=s Ecofeminist Ethics and Merleau-Ponty=s Body-Subject: Intersections,@ Ethics and the Environment 13(no. 2, 2008):101-118. While Karen Warren offers an ecofeminist ethic that is pluralistic, contextualist, and challenges Cartesian dualism, one area that remains underdeveloped in her theory is embodiment. I will examine Merleau-Ponty=s notion of embodied subjectivity and show that it would fit consistently with her theory. I will
also explore some other areas in which the two theories supplement each other. Burns is assistant professor of philosophy at Dominican University in River Forest, IL.


Burrell, David, Malits, Elena. Original Peace: Restoring God's Creation. Mahwah, N.J.: Paulist Press, 1997. $6.95. A work of philosophical theology that places Christ at the meeting place between humans and their natural world. The authors take seriously what is traditionally called "fall-and-redemption theology", thereby taking exception to the works of some theorists who deny the importance of original sin. (v8,#2)

Burrows, Mae, "Just Transition," Alternatives 27(no. 1, Winter 2001):29-. Moving to a green economy will be more attractive when programs are designed to remove job loss fears, and focus on transition to a more sustainable future. (v.12,#2)

Burton, Anthony C., Susan M. Chilton, Martin K. Jones. "The WTP/WTA Discrepancy: A Preliminary Qualitative Examination." Environmental Values 9(2000):481-491. ABSTRACT: This paper explores the psychological foundations of the 'Willingness to Pay/Willingness to Accept' discrepancy. Using a qualitative approach we find that the two response modes appear to invoke different strategies for completion. An examination of the heuristics used by respondents to answer questions concerning the buying and selling of the chance to play a straightforward lottery shows that only some could be taken as supporting current theories which aim to explain the discrepancy. Keywords: Willingness to pay, willingness to accept, heuristics. Anthony C. Burton is at the Nuffield Institute for Health, University of Leeds, UK. Susan M. Chilton is in the Department of Economics, University of Newcastle, UK. Martin K. Jones is in the Department of Economics, University of Dundee, UK. (EV)


Burton, Ian and Peter Timmerman, "Human Dimensions of Global Change: A Review of Responsibilities and Opportunities," International Social Science Journal 41(1989):297-313. "Ordinary human interactions with the environment are entering a new stage that calls for an extraordinary response." "As we now enter the era of global change, a new relationship has to be forged between human society and environment, which will be morally, economically and ecologically sustainable." "A new environmental ethic and a coalition of reason will be needed." "The moral solidarity of humankind must continue to grow." The authors are in geography, International Federation of Institutes for Advanced Study, Toronto. This whole journal issue is on the theme: Reconciling the Sociosphere and the Biosphere: Global Change, Industrial Metabolism, Sustainable Development, Vulnerability. (v5,#4)
Burton, Jeanne L., & McBride, Brian W., "Recombinant Bovine Somatotropin (rbST): Is There a Limit for Biotechnology in Applied Animal Agriculture?", Journal of Agricultural Ethics 2(1989):129-159. The intent of this article is to outline, integrate, and interpret relevant scientific, economic, and social issues of rbST technology that have contributed to the acceptance dilemma for this product. Although this article demonstrates that rbST has met most physiological criteria for acceptance, the consuming public has treated the acceptance issue with forceful skepticism. The question this article addresses is, why? Burton and McBride are in animal and poultry science at the University of Guelph, Ontario.

Burton, L. and Williams, T., "This Bird Has Flown: The Uncertain Fate of Wildlife on Closed Military Bases," Natural Resources Journal 41(no.4, 2001): 885-918. (v.13,#2)

Burton, Peter S., "Land Use Externalities: Mechanism Design for the Allocation of Environmental Resources," Journal of Environmental Economics and Management 30(1996);174-185. The competing interests of "the forest industry" and of "environmentalists" for three possible land uses: "intensive forestry," "nonintensive forestry," and "wilderness." Constraints imposed by the finite amount of land available and the reluctance of the environmentalists to use monetary valuation techniques can be overcome by using a modified version of the Groves mechanism to determine the preferences of each group and thereby to determine the socially optimal allocation. A technical paper in economics. Burton is in economics, Dalhousie University, Halifax, NS. (v.10,#2)


Burtonchristie (Burton-Christie), Douglas, "Mapping the Sacred Landscape: Spirituality and the Contemporary Literature of Nature," Horizons (College Theological Society, Villanova, PA) 21 (no. 1, 1994):22-47. The contemporary dialogue between spirituality and the contemporary literature of nature. (1) Their distinctive approaches to the mapping of the sacred landscape. (2) Some of the ambiguities and tensions within the literature of nature toward matters of religion. (3) Recent developments within the discipline of spirituality that enable scholars to respond more thoughtfully to questions raised by nature writers. (4) Genres found in the burgeoning literature of nature writing and themes that make it a useful resource and conversation partner for spirituality. (5) Evaluation of three prominent themes in contemporary nature writing--relationship, mystery, and moral responsibility--themes of particular importance for developing a contemporary spirituality of nature. Burton-Christie is at the Jesuit School of Theology, Graduate Theological Union, Berkeley, also the author of The Word in the Desert: Scripture and the Quest for Holiness in Early Christian Monasticism (Oxford University Press, 1993). (v.10,#1)

Burtraw, Dallas, "Compensating Losers When Cost-Effective Environmental Policies Are Adopted," Resources (Resources for the Future), Summer 1991, no. 104. (v2,#3)
Busby, C.C., and A.V. Yablokov, eds. European Committee on Radiation Risk. *Chernobyl 20 Years On: Health Effects of the Chernobyl Accident*. Brussels: Green Audit, 2006. Although only 290 people died of direct radiation damage, Rosalie Bertell estimates that another 899,310 to 1,786,657 people died of fatal cancers attributable to indirect radiation contamination. Contents include: (1) AThe Chernobyl Catastrophe 20 Years After (a meta-review)@ by Alexy Y. Yablokov, (2) AIs it Safe to Live in Territories Contaminated with Radioactivity: Consequences of the Chernobyl Accident 20 Years Later@ by E.B. Burlakova and A.G. Nazarov, (3) AMental, Psychological and Central Nervous System Effects: Critical Comments on the Report of the UN Chernobyl Expert Group <<Health>> (EGH)@ by Konstantin N. Loganovsky, (4) AThe Influence of the Chernobyl Accident on Wild Vertebrate Animals@ by Eugene Yu. Krysanov, (5) AChromosome Aberrations in the Blood Lymphocytes of People Exposed to Radiation as a Result of the Chernobyl Accident@ by G.P. Snigiryova and V.A. Shevchenko, (6) ARadiation-Induced Effects in Humans After in utero Exposure: Conclusions from Findings After the Chernobyl Accident@ by Inge Schmitz-Feuerhake, (7) ARadiation-Induced Effects in Humans After in utero Exposure: Conclusions from Findings After the Chernobyl Accident@ by Inge Schmitz-Feuerhake, (7) AReflections of the Chernobyl Accident on the Plant World: Special and General Biological Aspects@ by D.M Grodzinsky, (8) AInfant Leukemia in Europe after Chernobyl and Its Significance for Radioprotection; a Meta-Analysis of Three Countries Including New Data from the UK@ by Chris Busby, (9) ALiquidators Health: A Meta-Analysis@ by Alexy V. Yablokov, (10) ADA Did Acute Radiation Syndrome Occur Among the Inhabitants of the 30 km Zone@ by Tetsuji Imanaka, (11) ACombined Spatial-Temporal Analysis of Malformation Rates in Bavaria After the Chernobyl Accident@ by Helmut Küchenhoff, Astrid Engelhardt, and Alfred Körblein, (12) ARadio-Ecological Consequences in Belarus 20 Years After the Chernobyl Catastrophe and the Necessity of Long-Term Radiation Protection for the Population@ by V.B. Nesterenko and A.V. Nesterenko, (13) AStudies of Pregnancy Outcome Following the Chernobyl Accident@ by Alfred Körblein, and (14) AFirst Assessment of the Actual Death Toll Attributable to the Chernobyl Disaster Based Upon Conventional Risk Methodology@ by Rosalie Bertell. This book can be downloaded as a PDF at the website: <http://www.euradcom.org/publications/chernobylinformation.htm>.
the Chernobyl Accident on the Plant World: Special and General Biological Aspects@ by D.M Grodzinsky, (8) AInfant Leukemia in Europe after Chernobyl and Its Significance for Radioprotection; a Meta-Analysis of Three Countries Including New Data from the UK@ by Chris Busby, (9) ALiquidators Health: A Meta-Analysis@ by Alexy V. Yablokov, (10) ADid Acute Radiation Syndrome Occur Among the Inhabitants of the 30 km Zone@ by Tetsuji Imanaka, (11) ACombined Spatial-Temporal Analysis of Malformation Rates in Bavaria After the Chernobyl Accident@ by Helmut Küchenhoff, Astrid Engelhardt, and Alfred Körblein, (12) ARadio-Ecological Consequences in Belarus 20 Years After the Chernobyl Catastrophe and the Necessity of Long-Term Radiation Protection for the Population@ by V.B. Nesterenko and A.V. Nesterenko, (13) AStudies of Pregnancy Outcome Following the Chernobyl Accident@ by Alfred Körblein, and (14) AFirst Assessment of the Actual Death Toll Attributable to the Chernobyl Disaster Based Upon Conventional Risk Methodology@ by Rosalie Bertell. This book can be downloaded as a PDF at the website:

Busch, Lawrence, "Virgil, vigilance, and voice: Agrifood ethics in an age of globalization," Journal of Agricultural and Environmental Ethics 16(2003):459-477. Some 2000 years ago, Virgil wrote The Georgics, a political tract on Roman agriculture in the form of a poem. Today, as a result of rising global trade in food and agricultural products, growing economic concentration, the merging of food and pharmacy, chronic obesity in the midst of hunger, and new disease and pest vectors, we are in need of a new Georgics that addresses the two key issues of our time: vigilance and voice. KEY WORDS: agricultural policy, democracy, governance, standards, Virgil. (JAEE)

Busch, Lawrence, "The Homiletics of Risk," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):17-29. Today there is considerable disagreement between the US and the EU with respect to food safety standards. Issues include GMOs, beef hormones, unpasteurized cheese, etc. In general, it is usually asserted that Europeans argue for the precautionary principle (with exceptions such as the Sanitary and Phytosanitary Agreement where "substantial equivalence," a form of familiarity, is used) while Americans defend risk analysis or what is sometimes described as the familiarity principle. This is not to suggest that EU member countries agree on how the precautionary principle should be applied; considerable differences exist among nations as will be noted below.

I review both positions arguing that they are best understood as variants of the homiletics of risk rather than as differing scientific positions. I conclude that while science must necessarily enter into the formulation of food and agricultural standards, state policy, private economic interests, and the interface between the two (e.g., when democratic states are successfully lobbied to support particular private interests), play important roles in determining how particular risks will be treated. Moreover, I argue that the role of science must necessarily be limited if its credibility is to be preserved. KEY WORDS: food safety, genetically modified organisms, policy, regulation, risk, standards. Busch is with the Institute for Food and Agricultural Standards, Michigan State University, East Lansing, MI. (JAEE)

Bush, George on Environmental Ethics. On June 8, 1989, President George Bush outlined five principles of his administration's environmental ethic in an address to the Sixth International Waterfowl Symposium in Washington, DC. Bush said, "It's time to renew the environmental ethic in America," and went on to claim that "the environment is a moral issue, ... it is imperative that we preserve the earth and all its blessings," citing Aldo Leopold and his land ethic. Bush emphasized his policy of "no net loss" of wetlands. See story in *Earth Ethics*, vol. 1, no. 2, p. 10. (v1,#2)

Business and the Environment is the theme issue of *Illahee: Journal for the Northeast Environment*, vol. 10, no. 1, spring 1994. Sample article: Stuart L. Hart, University of Michigan, "How Green Production Might Sustain the World." Also a section featuring businesses that are making more effort in environmental responsibility. *Species, Habitats, and Ecological Health* is the theme of vol. 10, no. 2, summer 1994. Sample article: Gordon H. Orians, "Endangered Species and Endangered Habitats," arguing that, although the potential benefits of the Endangered Species Act are considerable, there are many flexible options available, under existing law, giving ample authority for an ecosystem approach to conserving the nation's living species and habitats. Contact: Institute for Environmental Studies, University of Washington, Seattle, WA 98195. (v5,#3)

Business Ethics Quarterly, vol. 5, no. 4, October 1995 is a theme issue on business and the environment. Contains:


--Brenkert, George G., "The Environment, The Moralist, the Corporation and Its Culture," *Business Ethics Quarterly* 5(1995):675-697. Business has its own special "ethics," which relates not simply to the internal nature of the corporation but also to the corporate (free market) system. Given this special ethics, business cannot in general be environmentally responsible in the manner that classical moralists demand. More far-reaching changes are needed.

--Frederick, Robert E., and W. Michael Hoffman, "Environmental Risk Problems and the Language of Ethics," *Business Ethics Quarterly* 5(1995):699-711. Six criteria for assessing proposed solutions to environmental risk problems. But before these criteria can be used business persons must be willing to discuss the problem in ethical terms, and they are often reluctant to do so.


--Rolston, Holmes, III, "Environmental Protection and an Equitable International Order: Ethics after the Earth Summit," *Business Ethics Quarterly* 5(1995):735-752. The UNCED Summit established two new principles of international justice: an equitable international order and protection of the environment. Wealth is asymmetrically distributed; approximately one-fifth of the world produces and consumes approximately four-fifths of goods and services. This difference can be interpreted as both an earnings differential and as exploitation; responses may require justice or charity, producing and sharing.
Shrader-Frechette, Kristin S., "Environmental Risk and the Iron Triangle," Business Ethics Quarterly 5(1995):753-777. There appears to be an iron triangle of industry, government, and consultant/contractors promoting the siting of the first permanent geological repository of high-level nuclear waste and spent fuel proposed for Yucca Mountain, Nevada. The iron triangle has ignored important epistemological and ethical difficulties with the proposed facility.

Orts, Eric W., "A Reflexive Model of Environmental Regulation," Business Ethics Quarterly 5(1995):779-794. We should begin to consider a new model of reflexive environmental law. This regulatory strategy aims to provide more reflective as well as more efficient environmental regulation.


Butler, Lynda L., "State Environmental Programs: A Study in Political Influence and Regulatory Failure." William and Mary Law Review, vol. 31, no. 4, Spring 1990. Butler is at the School of Law, College of William and Mary. (v1,#3)


Butler Ricketts, Catherine, Hume's Passion and Aristotle's Virtue: Ethics of Caring and Their Application to the Natural World, Master's Thesis, Department of Philosophy, Lancaster University, September 1993. (v7,#1)

Butler, Victoria, "Unquiet on the Western Front: Controversy in Kenya," *International Wildlife* 28 (no. 6, Nov./Dec. 1998): 12-24. Controversy about conservation strategy and the extent to which it can and ought to include local peoples, in a land where the population has grown from 9 to 28 million in three decades, and encroachments on wildlife parks has reduced the wildlife by 44%, both by direct impact and by reduced buffer zones. The current head of the Kenya Wildlife Service is David Western, who favors more concessions to local people. Former head Richard Leakey takes a harder line and believes that the concessions will prove the park's undoing, as well as unraveling Kenya's tourism, vital in the Kenyan economy. (v.9,#4)

Butler, W.F., and T.G. Acott, An Inquiry Concerning the Acceptance of Intrinsic Value Theories of Nature, *Environmental Values* 16(2007): 149-168. This study empirically assesses the extent to which intrinsic value theories of nature are accepted and acknowledged outside the realm of academic environmental ethics. It focuses on twenty of the largest landowning organisations in England, including both conservation and non-conservation organisations and investigates the environmental philosophical beliefs and values held by representative individuals of these groups. An in-depth interview was held with a representative from each organisation. The interviews were analysed using qualitative data analysis software and the results compared against a backdrop of academic philosophical positions. The study found that an ecocentric position which acknowledges nature's intrinsic value was adopted by the majority of respondents, both from conservation and non-conservation organisations. However, it was also found that individuals felt the idea of nature's intrinsic value was generally not reflected in organisational policy. The authors are at the Department of Earth and Environmental Science, University of Greenwich, Kent, UK.


Buttel, Frederick H., Dickens, Peter, Dunlap, Riley E., and Gijswijt, August, *Sociological Theory and The Environment*. Lanham, MD: Littlefield, 2002. With attention to Marx, Durkheim, Weber in the past, and to contemporary issues, individual and society, modernity, culture and the natural world; consumption, lifestyles, and the environment; globalization vs. localism. (v.13,#2)


Button, Gregory V. "'What You Don't Know Can't Hurt You': The Right to Know and the Shetland Island Oil Spill," *Human Ecology* 23, no. 2 (June 1995): 241-. (v6,#4)

Byers, E. Sandra, "Wilderness Camping as a Therapy for Emotionally Disturbed Children: A Critical Review," Exceptional Children 45 (no. 8, May 1979):628-635 (Journal of the Council for Exceptional Children, Reston, VA) The wilderness camp has been described as a particularly good setting for treatment of emotionally disturbed children. This article summarizes the current literature on therapeutic camping, including the nature of existing programs, rationales for the superiority of camping as a therapeutic program, and evaluation of existing programs. The results of program evaluation research reported in the literature provides only minimal support for any particularly effectiveness ascribed to therapeutic camping in terms of either short-term or long-term therapeutic outcome. This is largely due to inadequate investigation of the process and/or the outcome of therapeutic camping. Byers is in psychology, University of New Brunswick, Fredericton, New Brunswick, Canada.

Byrne, J. Peter, "Basic Themes For Regulatory Takings Litigation," Environmental Law 29 (No. 4, 1999): 811- . Professor Byrne presents arguments for a narrow reading - consistent with the original understanding - of the Fifth Amendment's Takings Clause. He explains how these arguments, called "litigation themes," can be used in regulatory takings cases to advance this position. He stresses that the use of litigation themes is particularly important in the regulatory takings context because of the ambiguities and contradictions in the case law on the subject. (v.11,#2)


Byrne, Richard W., The Thinking Ape: Evolutionary Origins of Intelligence. New York: Oxford University Press, 1995. 266 pages. "It seems that the great apes, especially the common chimpanzee, can attribute mental states to other individuals; but no other group of animals can do so--apart from ourselves, and perhaps cetaceans" (p. 146). "A sharp discontinuity is implied between great apes and all other animals" (p. 154). (v.8,#4)