International Society for Environmental Ethics

Newsletter

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GENERAL ANNOUNCEMENTS

New Newsletter Editor. Amy Knisley, Associate Professor of Philosophy and Chair of the Department of Humanities at Colby-Sawyer College, has agreed to take over as newsletter editor beginning with the next issue, for the duration of Phil Cafaro's sabbatical and perhaps permanently. Many thanks to Amy and thanks to ISEE's members for the opportunity to serve as newsletter editor for the past six years. Please send all news and notes, preferably via email, to aknisley@colby-sawyer.edu. Snail mail: Department of Humanities, Colby-Sawyer College, 541 Main Street, New London, NH 03257. Fax: 603-526-3452. Phone: 603-526-3422.

Newsletter Offering and Encouraging Electronic Format. The ISEE newsletter is now offered in an electronic version as well as the paper version. ISEE members are encouraged to "go electronic." The main rationales: switching to electronic mailing will save ISEE several thousand dollars per year and get you information two to four weeks faster. We hope, over the next few issues, to get the majority of members receiving the newsletter via email. Those who wish to continue receiving a paper copy of the newsletter may do so, but you only get one or the other! For those of you who would like to make the switch, please email ISEE treasurer Lisa Newton with your email address at lhnewton@mail.fairfield.edu.Please put "go electronic" in the subject heading Thanks!

Call for nominations. The ISEE nominations committee is looking for individuals willing to run in an election for membership on the ISEE nominations committee. The business of this committee is to identify candidates for officers of ISEE (Vice-President/President Elect, Secretary, and Treasurer). We are instituting a practice of holding elections for nominations committee members every three years. The current members are likely to run again, but believe the election should be wide open. We particularly need non-U.S. ISEE members on this committee. Please send nominations (including self-nominations) to anyone on the current ISEE nominations committee: Ronnie Hawkins: liveoak@pegasus.cc.ucf.edu, Ned Hettinger (Chair): hettingern @cofc.edu, and Christopher Preston: christopher.preston@mso.umt.edu.

The ISEE experimented with a new form of collaboration in late February, joining a mini-conference on Environmental Policy to the much larger Annual Meeting of the Association for Practical and Professional Ethics. First product is a mailing list of attendees, many of whom (a) seemed to enjoy themselves and (b) are not on the ISEE membership list. We'll try to do something about that last. The presentations were wonderful: Gene Hargrove gave the keynote address and chaired the first panel on policy, featuring a spectacular introduction to a Chilean national park--to be explored with a magnifying glass! Bob Frodeman presented an enlightening account of an ethicist in a government agency, then chaired a session on science and aesthetics (of the Cape Wind Farm). Paul Thompson guided the third group, featuring an amazing local story (by faculty and Sisters of the Incarnate Word) of the restoration of the spring that feeds the San Antonio River, complete with Maori blessings and nature paths.

Lisa Newton, who contributed this report, writes that she is continually amazed at the range of subjects and activities encompassed by our small society. She hopes we shall explore further opportunities for collaboration.

Jim Tantillo has accepted a position as Interim Executive Director of the Tompkins County SPCA in Ithaca, NY. For the past few years, the TC SPCA has been the leading “no kill” animal shelter in the U.S., with the lowest euthanasia rate of any community in the country. Tantillo will also continue to teach one course a semester in environmental ethics as a Lecturer in the Department of Natural Resources at Cornell.

World Conservation Union - International Union for the Conservation of Nature (IUCN) endorses the Earth Charter. The World Conservation Congress at its 3rd session in Bangkok, November 17-25, 2004, approved a resolution endorsing the Earth Charter. The approved resolution states that the Congress:
* Endorses the Earth Charter as an inspirational expression of civil society's vision for building a just, sustainable and peaceful world.
* Recognizes, consistent with IUCN's mission, the Earth Charter as an ethical guide for IUCN policy and will work to implement its principles through the IUCN Programme.
* Recommends that the Earth Charter be used by the IUCN to help advance education and dialogue on global interdependence, shared values, and ethical principles for sustainable ways of living; and
* Encourages member organizations and states to examine the Earth Charter and to determine the role the Earth Charter can play as a policy guide within their own spheres of responsibility.

The Acton Institute for the Study of Religion and Liberty is a well-funded conservative organization with a primary mission of reconciling Christianity and capitalism. If you like what you read in the gospels except for all that crap about giving your cloak, too, when someone asks for your shirt, it being easier for a camel to get through the eye of a needle than for a rich man to get into heaven, etc., then this is the group for you. ISEE members might want to check out their website, www.acton.org, for a sophisticated anti-environmentalism masquerading as reasonable caution. The website contains numerous articles and opinion pieces on green building, forestry and a wide range of environmental topics; lots of good material to assign students giving “the other side” on particular environmental topics.

Wangari Maathai. The 2004 Nobel Peace Prize was awarded to a Kenyan woman environmentalist whose tree-planting movement defied political leaders. Wangari Maathai is now Kenya's deputy environment minister. She has fought for thirty years to empower women, improve the environment and fight corruption in Africa. She was Nairobi University's first woman professor before she left full-time academic life to found the Green Belt Movement, a women's environmental group fighting the clearing of forests for charcoal and property development. The movement she founded has planted twenty million trees in Kenya, and spread to Tanzania, Uganda, Ethiopia, and other African countries. She was a longtime opponent of Kenya's former strongman Daniel arap Moi. She was physically attacked by opponents on several occasions and was once released from jail only after Amnesty International helped fuel international protests. She was a visiting scholar at Yale, School of Forestry and Environmental Studies, in 2002 and is a graduate of the University of Pittsburgh. This is the first time the prize has been awarded for environmental work. Story in Christian Century 121 (no. 22, November 2, 2004): 14. Also story in Science 306 (15 October 2004):391.

The 2004 Annual Meeting of the American Academy of Religion, held in San Antonio, Texas, November 20-23, included a number of sessions of interest to environmentalists. (1) Earth Ethics: Celebrating the Work of Larry Rasmussen. (2)

Beyond the Borders: Religion and Ecology in Latin America. (3) Building Meta-Ecological Worlds: The Cultural Production of Environmental Awareness. (4) The Ethics of Exploration: Theological and Ethical Issues in Space Travel. (5) Animals as Subjects, Objects, and Symbols. Some twenty papers in these sections combined.

The ISEE Listserv is a forum for serious discussion of environmental ethics and to disseminate information quickly to your colleagues. To subscribe, send email to: LISTSERV@LISTSERV.TAMU.EDU, with the entire body of the message reading: SUBSCRIBE ISEE-L. You should then receive an e-mail asking you to confirm your participation. As soon as you follow the instructions in that email, you will be subscribed to the list. Questions, contact Gary Varner at gary@philosophy.tamu.edu.

Essays in Philosophy. Editor Michael Goodman is pleased to announce the publication of Vol. 6, No. 1 of *Essays in Philosophy*, an online journal at: http://www.humboldt.edu/~essays/. This issue of *Essays* is on “The Philosophy of Technology.” The papers published include: "Philosophy Regarding Technology," by James Farris; "Technology: History and Philosophy," by Keekok Lee; ”(En)Framing Heidegger's Philosophy of Technology," by Ronald Godzinski; "If the Truth Be Told of Techne: Techne as Ethical Knowledge," by Frances Latchford; "Ethics, Technology, and Posthuman Communities," by Steven Benko; "Technology and the Evolution of the Human: From Bergson to the Philosophy of Technology," by M. Scott Ruse; "The Many Faces of Science and Technology Relationships", by Ana Cuevas; "Aboriginal Cultures and Technocratic Culture," by Humberto Ortega Villasenor and Genaro Quinones Trujillo; "The Domestication of Water: Filtering Nature Through Technology," by David Macauley; "Sonar Technology and Shifts in Environmental Ethics," by Christine James; "Chess, Games, and Flies," by Stefano Franchi; "A Framework to Systematize Positions in Neuroethics," by Saskia Nagel and Nicolas Neubauer; "Thoughts on the Theory and Practice of Speculative Markets *qua* Event Predictors," by Mason Richey; "The Problem With the Technology of Time: Understanding the Ethics of Erazim Kohak's Concept of Authentic Time Through an Analysis of the Motion Picture *Cast Away*," by John Scott Gray.

Environmental Philosophy, the official journal of the Korean Society for the Study of Environmental Philosophy, has recently put out volume 3 (2004). Edited by Sun-Jin Kim, philosophy professor at Hallym University, the volume focuses on the history of environmental philosophy. It has two essays in English: one by the editor titled “Environmental History and the Origin of Ecological Crisis,” and one by Gene Hargrove titled “Environmental or Ecological Citizenship through Culture Specific Environmental Value Education.” Other essays, in Korean, are: Geon-Hoon Ahn, “The History of Environmental Philosophy in Korea”; Myung-Sik Kim, “The History of Environmental Philosophy in the Anglo-American World”; Hae-Rim Yang, “The History of Environmental Philosophy in Germany”; and a report from Sung-Jin Kim, “The Philosophy Department at Colorado State University and Professor Holmes Rolston.”

CONFERENCES AND CALLS FOR PAPERS

ISEE Sessions. Proposals are invited for individual papers or group sessions for the APA Pacific, Central and Eastern Division meetings. For the Pacific, contact ISEE treasurer Lisa Newton at lhnewton@mail.fairfield.edu. For the Central, contact ISEE secretary Paul Thompson, thomp649@pilot.msu.edu. For the Eastern, contact ISEE Vice-President Clare Palmer, cpalmer@artsci.wustl.edu. Snail mail addresses and telephone numbers at the end of the newsletter. The deadline for proposals is September 1 for the Pacific and Central, March 1 for the Eastern.

The Second Annual Joint Meeting on Environmental Philosophy intended to bring together the environmental philosophy community will occur from May 31st to June 3rd at the Highlands Center, on the border of Rocky Mountain National Park in Colorado. The meeting will be held at 8500 feet at the Highlands Center, a recently constructed (2002) retreat center which includes rooms, meeting space, and a cafeteria. Longs Peak (elev. 14,000) hovers above the conference center and is within close hiking distance. Rooms are available at the Highlands Center ranging from $85 singles to $120 for 4. We have reserved 15 rooms, each of which comfortably house between 2 and 4 guests. See http://www.highlandscamp.org/retreat_center.htm for further information. In addition, camping facilities and other housing options are available nearby. The hope is to attract a broad cross-section of the environmental philosophy community, including graduate students. In addition to contributed papers, the program will include papers by leading figures in the field. It is sponsored by ISEE, the International Association for Environmental Philosophy, and the University of North Texas. For further information, contact: Robert Frodeman, philosophy@unt.edu, or Dale Jamieson, dwj3@nyu.edu.

The International Association For Environmental Philosophy will hold their Seventh Annual Meeting at the Salt Lake City Downtown Marriott and Utah Valley State College on October 22 - 24, 2005 (immediately after the 44th Annual Meeting of SPEP). IAEP seeks participants for its 2005 program. There will be one presentation format: 20-minute talks with ten minutes for discussion. Please submit, by February 28, 2005, a one or two-page abstract (hard-copy or email) to Scott Cameron, Dept. of Philosophy, Loyola Marymount Univ., One LMU Dr., Suite 3600, Los Angeles, CA 90045-2659 or scameron@lmu.edu. Special sessions will planned for Monday October 24, on themes such as Religion, Philosophy and the Environment; Eco-feminism and Continental philosophy. Notice of selection will go out by May, 2005, and the program will be posted on their website by May 30: www.environmentalphilosophy.org.

IAEP offers a forum for the philosophical discussion of our relation to the natural environment. Embracing a broad understanding of environmental philosophy, IAEP encourages not only discussions of environmental ethics, but of environmental aesthetics, ontology, theology, the philosophy of science, political philosophy, ecofeminism, and the philosophy of technology. IAEP also welcomes a diversity of approaches to these issues, including those inspired by Continental philosophy, the history of philosophy, and the tradition of American philosophy. Membership in IAEP is open to everyone. Regular membership for 2004-2005 is $45 ($15 for students); it is payable to IAEP and should be sent to Scott Cameron, Dept. of Philosophy, Loyola Marymount Univ., One LMU Dr., Suite 3600, Los Angeles, CA 90045-2659. A subscription to the journal Environmental Philosophy (formerly named Call to Earth, but now greatly enlarged) comes with membership. Non-membership subscriptions to Environmental Philosophy are $30. These can be ordered from the same address.

The 8th World Wilderness Congress will be held in Anchorage, Alaska, from the 30th of September - the 6th of October 2005, with associated events in Kamchatka and the Russian Far East. Approximately 1,000 delegates from over 40 nations will attend. The congress is the longest-running, public, international environmental forum. The theme of the 8th WWC is “Wilderness, Wildlands and People - A Partnership for the Planet.” This Congress will generate the most up-to-date and accurate information on the benefits of wilderness and wildlands to contemporary and traditional societies, and will review the best models for balancing wilderness and wildlands conservation with human needs. The 8th WWC also will have a special focus on the wilderness, wildlands, and marine resources of Alaska, the Russian Far East, Canada, and the North Pacific and associated events may also convene in Russia. Register today at http://www.8wwc.org/.

The Thoreau Society will hold its annual gathering July 7-10 in Concord Massachusetts with the general theme "Thoreau: Nature, Science, and Higher Laws." Keynote addresses will be given by Winona LaDuke, "Environmental Justice from a Native Perspective," and Michael Kammen, "Thoreau and the American Seasons." Other papers will include: Tom Potter, "Thoreau and Birds"; Don Whaley, "Thoreau, Nature, and the Cultural History of Adventure"; Philip Cafaro, "Thoreau and Environmental Ethics"; David Robinson, "A Mind at Work: Thoreau and the Natural Life"; Bob Hudspeth, "Transcendentalism: Emerson to Thoreau"; Sandy Petrulionis, "Thoreau: Higher Laws and Social Conscience"; Joe Gilbert, "Thoreau: The Wild and Wilderness"; Ed Schofield, "Thoreau as Ecologist: A Transcendentalists Interest in Science, Nature and Higher Laws"; Mike Frederick, "Why should our life be in any respect provincial? A Query into the Role of Technology and the Society's mission"; Brad Dean, "Thoreau's Correspondence with H.G.O. Blake: An Inquiry into Higher Laws"; Laura Walls, "The Science & Nature Connection to Transcendentalism & Higher Laws"; Michael Berger, "The Dispersion of Seeds"; Richard Smith, "The Creation of Thoreau's Civil Disobedience"; Peter Alden, "Thoreau Country: Recent Changes in Bird and Plant Life." For more information check their website www.aa.psu.edu/thoreau and click on "Walden 2005."

Global Environmental Change, Globalization and International Security: New Challenges for the 21st Century. The 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community will be held at the University of Bonn, Germany, 9-13 October 2005. Details, including information, application forms, timelines and deadlines, are available at http://openmeeting.homelinux.org. For more information contacting Lis Mullin at openmeeting.ihdp@uni-bonn.de.

The Global Ecological Integrity Group will hold a conference titled "Global Ecological Integrity and the Sustainability of Civilization: Hard and Soft Law Perspectives." To be held in the Centro Culturale Don Orione – Artigianelli. Dorsoduro, 909/A - 30123 Venice, Italy. June 29 through July 3, 2005. The conference is organized by Laura Westra (lwestra@interlog.com) and Colin Soskolne (colin.soskolne @ualberta.ca); interested parties may contact them for further details.

The Ethics of Genetic Commerce. The Japha Symposium on Business and Professional Ethics will be held November 11, 2005 in Boulder, Colorado. http://leeds.colorado.edu/japha**.** Organizers seek academically-oriented studies of issues related to the ethics of genetic commerce. Likely approaches might include: the ethics of genetic screening of insurance applicants or potential employees; social issues involved in the genetic modification of plants or the cloning of animals; business use of genetic information; access to gene therapy; and other concerns related to the creation, use, and control of genetic material and information. The key for successful submission is to focus on the business ethics of genetic commerce. Papers must be in English and an ideal length is 20 pages. Travel grants and honoraria will be available for paper presenters. Papers presented at the Japha Symposium will be published in a monograph series published by Blackwell Publishers. Submit a two-page proposal by August 1 and final papers by September 15, 2005 to: Lyla Hamilton, Faculty Director, Center for Business and Society, Leeds School of Business, University of Colorado, 419 UCB, Boulder, Colorado 80309. Lyla.Hamilton@Colorado.edu. (303) 735-4358.

OPPORTUNITIES

Colgate University seeks applications for a teaching, research and programming postdoctoral fellowship in its Environmental Studies Program starting in August 2005. The fellowship is intended for a recent Ph.D. (or ABD if the Ph.D. will be completed by

September 1, 2005) in a discipline relevant to one of the following: Environmental Justice, Environmental Politics, Environmental Law, Environmental Sociology. This is a one-year position that combines teaching, research and programming at a liberal arts institution. The teaching responsibilities will be one course each semester. ENST currently programs an ongoing film series, a colloquium series, a bi-annual Newsletter, and an ENST career clearinghouse (gathering and disseminating information on professional opportunities, graduate programs and summer student research positions). The postdoctoral fellow will be responsible for programming these events and directing a student staff who will assist in these duties. Annual compensation is $36,000 plus benefits. Candidates should submit a curriculum vitae, evidence of teaching experience, statement of teaching philosophy and three letters of recommendation to be sent to Randy Fuller, Director of Environmental Studies, Biology Department, Colgate University, 13 Oak Drive, Hamilton, NY 13346. Evaluation of applications will begin April 15th and continue until the position is filled.

GOD'S EARTH IS SACRED: AN OPEN LETTER TO CHURCH AND SOCIETY IN THE U.S. FROM THE WORLD COUNCIL OF CHURCHES

God's creation delivers unsettling news. Earth's climate is warming to dangerous levels; 90 percent of the world's fisheries have been depleted; coastal development and pollution are causing a sharp decline in ocean health; shrinking habitat threatens to extinguish thousands of species; over 95 percent of the contiguous United States forests have been lost; and almost half of the population in the United States lives in areas that do not meet national air quality standards. In recent years, the profound danger has grown, requiring us as theologians, pastors, and religious leaders to speak out and act with new urgency.

We are obliged to relate to Earth as God's creation "in ways that sustain life on the planet, provide for the [basic] needs of all humankind, and increase justice." Over the past several decades, slowly but faithfully, the religious community in the United States has attempted to address issues of ecology and justice. Our faith groups have offered rich ecological perspectives, considered moral issues through the lens of long-standing social teaching, and passed numerous policies within our own church bodies. While we honor the efforts in our churches, we have clearly failed to communicate the full measure and magnitude of Earth's environmental crisis-religiously, morally, or politically. It is painfully clear from the verifiable testimony of the world's scientists that our response has been inadequate to the scale and pace of Earth's degradation.

To continue to walk the current path of ecological destruction is not only folly; it is sin. As voiced by Ecumenical Patriarch Bartholomew, who has taken the lead among senior religious leaders in his concern for creation: "To commit a crime against the natural world is a sin. For humans to cause species to become extinct and to destroy the biological diversity of God's creation . . . for humans to degrade the integrity of Earth by causing changes in its climate, by stripping the Earth of its natural forests, or destroying its wetlands . . . for humans to injure other humans with disease . . . for humans to contaminate the Earth's waters, its land, its air, and its life, with poisonous substances . . . these are sins." We have become un-Creators. Earth is in jeopardy at our hands.

This means that ours is a theological crisis as well. We have listened to a false gospel that we continue to live out in our daily habits-a gospel that proclaims that God cares for the salvation of humans only and that our human calling is to exploit Earth for our own ends alone. This false gospel still finds its proud preachers and continues to capture its adherents among emboldened political leaders and policy makers.

The secular counterpart of this gospel rests in the conviction that humans can master the Earth. Our modern way of life assumes this mastery. However, the sobering truth is that we hardly have knowledge of, much less control over, the deep and long-term consequences of our human impacts upon the Earth. We have already sown the seeds for many of those consequences. The fruit of those seeds will be reaped by future generations of human beings, together with others in the community of life.

The imperative first step is to repent of our sins, in the presence of God and one another. This repentance of our social and ecological sins will acknowledge the special responsibility that falls to those of us who are citizens of the United States. Though only five percent of the planet's human population, we produce one-quarter of the world's carbon emissions, consume a quarter of its natural riches, and perpetuate scandalous inequities at home and abroad. We are a precious part of Earth's web of life, but we do not own the planet and we cannot transcend its requirements for regeneration on its own terms. We have not listened well to the Maker of Heaven and Earth.

The second step is to pursue a new journey together, with courage and joy. By God's grace, all things are made new. We can share in that renewal by clinging to God's trustworthy promise to restore and fulfill all that God creates and by walking, with God's help, a path different from our present course. To that end, we affirm our faith, propose a set of guiding norms, and call on our churches to rededicate themselves to this mission. We firmly believe that addressing the degradation of God's sacred Earth is the moral assignment of our time comparable to the Civil Rights struggles of the 1960s, the worldwide movement to achieve equality for women, or ongoing efforts to control weapons of mass destruction in a post-Hiroshima world.

Ecological Affirmations of Faith

We stand with awe and gratitude as members of God's bountiful and good creation. We rejoice in the splendor and mystery of countless species, our common creaturehood, and the interdependence of all that God makes. We believe that the Earth is home for all and that it has been created intrinsically good (Genesis 1).

We lament that the human species is shattering the splendid gifts of this web of life, ignoring our responsibility for the well being of all life, while destroying species and their habitats at a rate never before known in human history.

We believe that the Holy Spirit, who animates all of creation, breathes in us and can empower us to participate in working toward the flourishing of Earth's community of life. We believe that the people of God are called to forge ways of being human that enable socially just and ecologically sustainable communities to flourish for generations to come. And we believe in God's promise to fulfill all of creation, anticipating the reconciliation of all (Colossians 1:15), in accordance with God's promise (II Peter 3:13).

We lament that we have rejected this vocation, and have distorted our God-given abilities and knowledge in order to ransack and often destroy ecosystems and human communities rather than to protect, strengthen, and nourish them.

We believe that, in boundless love that hungers for justice, God in Jesus Christ acts to restore and redeem all creation (including human beings). God incarnate affirms all creation (John 1:14), which becomes a sacred window to eternity. In the cross and resurrection we know that God is drawn into life's most brutal and broken places and there brings forth healing and liberating power. That saving action restores right relationships among all members of "the whole creation" (Mark 16:15).

We confess that instead of living and proclaiming this salvation through our very lives and worship, we have abused and exploited the Earth and people on the margins of power and privilege, altering climates, extinguishing species, and jeopardizing Earth's capacity to sustain life as we know and love it.

We believe that the created world is sacred-a revelation of God's power and gracious presence filling all things. This sacred quality of creation demands moderation and sharing, urgent antidotes for our excess in consumption and waste, reminding us that economic justice is an essential condition of ecological integrity. We cling to God's trustworthy promise to restore, renew, and fulfill all that God creates. We long for and work toward the day when churches, as embodiments of Christ on Earth, will respond to the "groaning of creation" (Romans 8:22) and to God's passionate desire to "renew the face of the Earth" (Psalm 104:30). We look forward to the day when the lamentations and groans of creation will be over, justice with peace will reign, humankind will nurture not betray the Earth, and all of creation will sing for joy.

Guiding Norms for Church and Society

These affirmations imply a challenge that is also a calling: to fulfill our vocation as moral images of God, reflections of divine love and justice charged to "serve and preserve" the Garden (Genesis 2:15).

Given this charge and the urgent problems of our age-from species extinctions and mass poverty to climate change and health-crippling pollution-how shall we respond? What shall we be and do? What are the standards and practices of moral excellence that we ought to cultivate in our personal lives, our communities of faith, our social organizations, our businesses, and our political institutions? We affirm the following norms of social and environmental responsibility:

Justice -- creating right relationships, both social and ecological, to ensure for all members of the Earth community the conditions required for their flourishing. Among human members, justice demands meeting the essential material needs and conditions for human dignity and social participation. In our global context, economic deprivation and ecological degradation are linked in a vicious cycle. We are compelled, therefore, to seek eco-justice, the integration of social justice and ecological integrity. The quest for eco-justice also implies the development of a set of human environmental rights, since one of the essential conditions of human well being is ecological integrity. These moral entitlements include protection of soils, air, and water from diverse pollutants; the preservation of biodiversity; and governmental actions ensuring the fair and frugal use of creation's riches.

Sustainability -- living within the bounds of planetary capacities indefinitely, in fairness to both present and future generations of life. God's covenant is with humanity and all other living creatures "for all future generations" (Genesis 9:8-17). The concern for sustainability forces us to be responsible for the truly long-term impacts of our lifestyles and policies.

Bioresponsibility -- extending the covenant of justice to include all other life forms as beloved creatures of God and as expressions of God's presence, wisdom, power, and glory. We do not determine nor declare creation's value, and other creatures should not be treated merely as instruments for our needs and wants. Other species have their own integrity. They deserve a "fair share" of Earth's bounty- a share that allows a biodiversity of life to thrive along with human communities.

Humility -- recognizing, as an antidote to arrogance, the limits of human knowledge, technological ingenuity, and moral character. We are not the masters of creation. Knowing human capacities for error and evil, humility keeps our own species in check for the good of the whole of Earth as God's creation.

Generosity -- sharing Earth's riches to promote and defend the common good in recognition of God's purposes for the whole creation and Christ's gift of abundant life. Humans are not collections of isolated individuals, but rather communities of socially and ecologically interdependent beings. A measure of a good society is not whether it privileges those who already have much, but rather whether it privileges the most vulnerable members of creation. Essentially, these tasks require good government at all levels, from local to regional to national to international.

Frugality -- restraining economic production and consumption for the sake of eco-justice. Living lives filled with God's Spirit liberates us from the illusion of finding wholeness in the accumulation of material things and brings us to the reality of God's just purposes. Frugality connotes moderation, sufficiency, and temperance. Many call it simplicity. It demands the careful conservation of Earth's riches, comprehensive recycling, minimal harm to other species, material efficiency and the elimination of waste, and product durability. Frugality is the corrective to a cardinal vice of the age: prodigality - excessively taking from and wasting God's creation. On a finite planet, frugality is an expression of love and an instrument for justice and sustainability: it enables all life to thrive together by sparing and sharing global goods.

Solidarity -- acknowledging that we are increasingly bound together as a global community in which we bear responsibility for one another's well being. The social and environmental problems of the age must be addressed with cooperative action at all levels-local, regional, national and international. Solidarity is a commitment to the global common good through international cooperation.

Compassion -- sharing the joys and sufferings of all Earth's members and making them our own. Members of the body of Christ see the face of Christ in the vulnerable and excluded. From compassion flows inclusive caring and careful service to meet the needs of others.

A Call to Action: Healing the Earth and Providing a Just and Sustainable Society

For too long, we, our Christian brothers and sisters, and many people of good will have relegated care and justice for the Earth to the periphery of our concerns. This is not a competing "program alternative," one "issue" among many. In this most critical moment in Earth's history, we are convinced that the central moral imperative of our time is the care for Earth as God's creation.

Churches, as communities of God's people in the world, are called to exist as representatives of the loving Creator, Sustainer, and Restorer of all creation. We are called to worship God with all our being and actions, and to treat creation as sacred. We must engage our political leaders in supporting the very future of this planet. We are called to cling to the true Gospel - for "God so loved the cosmos" (John 3:16) - rejecting the false gospels of our day.

We believe that caring for creation must undergird, and be entwined with, all other dimensions of our churches' ministries. We are convinced that it is no longer acceptable to claim to be "church" while continuing to perpetuate, or even permit, the abuse of Earth as God's creation. Nor is it acceptable for our corporate and political leaders to engage in "business as usual" as if the very future of life-support systems

were not at stake.

Therefore, we urgently call on our brothers and sisters in Christ, and all people of good will, to join us in understanding our responsibilities as those who live within the United States of America - the part of the human family that represents five percent of the world population and consumes 25 percent of Earth's riches. We believe that one of the surest ways to gain this understanding is by listening intently to the most vulnerable: those who most immediately suffer the consequences of our over-consumption, toxification, and hubris. The whole Earth is groaning, crying out for healing-let us awaken the "ears of our souls" to hear it, before it's too late.

Integrating this understanding into our core beliefs and practices surrounding what it means to be "church," to be "human," to be "children of God." Such integration will be readily apparent in: Congregational mission statements, lay and ordained ministries, the preaching of the Word, our hymns of praise, the confession of our sins, our financial stewardship and offerings to God, theological education, our evangelism, our daily work, sanctuary use, and compassionate service to all communities of life. With this integrated witness we look forward to a revitalization of our human vocation and our churches' lives that parallels the revitalization of God's thriving Earth.

Advocating boldly with all our leaders on behalf of creation's most vulnerable members (including human members). We must shed our complacency, denial, and fears and speak God's truth to power, on behalf of all who have been denied dignity and for the sake of all voiceless members of the community of life. In Christ's name and for Christ's glory, we call out with broken yet hopeful hearts: join us in restoring God's Earth-the greatest healing work and moral assignment of our time.

Signed,

Neddy Astudillo, Latina Eco-Theologian, Presbyterian Church USA; Father John Chryssavgis, Greek Orthodox Archdiocese of America; Dr. Dieter Hessel, Director of the Ecumenical Program on Ecology, Justice, and Faith; Bishop Thomas L. Hoyt, Jr., President, National Council of Churches and Bishop of Louisiana and Mississippi, Christian Methodist Episcopal Church; Dr. Carol Johnston, Associate Professor of Theology and Culture and Director of Lifelong Theological Education at Christian Theological Seminary; Tanya Marcova-Barnett, Earth Ministry, Program Director; Bill McKibben, author and scholar-in-residence, Middlebury College; Dr. Cynthia Moe-Lobeda, Assistant Professor of Theology and Religious Studies at Seattle University; Dr. James A. Nash, social and ecological ethicist, retired; Dr. Larry Rasmussen, Reinhold Niebuhr Professor Emeritus of Social
Ethics, Union Theological Seminary, New York City; Rev. Dr. H. Paul Santmire, Author and Teaching Theologian, Evangelical Lutheran Church in America; Dr. Karen Baker-Fletcher, Associate Professor of Theology, Perkins School of Theology, Southern Methodist University; Dr. John B. Cobb, Jr., Emeritus Professor, Claremont School of Theology and Claremont Graduate School; Dr. Jay McDaniel, Director of the Steel Center for the Study of Religion and Philosophy, Hendrix College; Dr. Sallie McFague, Carpenter Professor of Theology Emerita, Vanderbilt University Divinity School Distinguished Theologian in Residence, Vancouver School of Theology, British Columbia; Dr. Barbara R. Rossing, New Testament Professor, Lutheran School of Theology at Chicago

ENVIRONMENTAL ETHICS AND POLICY GOVERNANCE IN INDIA

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In the last forty years, in the aftermath of decolonization, social unrest in many countries began to get organized around political rights for minorities, the quality of life, nuclear threats and the idea of peaceful coexistence, and critiques of economic development policies that neglected issues of social justice. Such movements were frequently internal to the nation-state, and required cross-class coalitions. New social movements built on what we now know as the politics of identity. They also provided a platform for international alliances among historically marginalized groups. But it would be wrong to presume that they have made colonialism or class issues less important than environmental movements in India. India has witnessed a range of environmental movements in the last 30 years.

Arguably, the rise of these movements is associated with the rise of an international environmental consciousness and growing protest against the deleterious consequences of infrastructure projects such as large dams. They also represent an increasing awareness of conservation agendas and their troubled relationship with development. The variations in the forms of environmental protests, in the demands that social actors express in relation to the environment, and in the success of different environmental mobilizations are all important. They indicate both the diversity of environmental issues and the robustness of the public sphere and its ability to generate and sustain debate.

Over the same period there have been significant environmental policy changes in India. The most visible and contentious cases have involved forestry and national parks, but other changes have also occurred in relation to irrigation and large dams. In addition, issues related to protection of air/water quality and biodiversity have recently begun to receive significant attention Relations between civil movements and policy change can be studied through a variety of lenses, including: the nature of the resource; the pressures exerted by international obligations; lobbying of government by interest groups such as the confederation of forest-based industry; large-scale popular public activism generated against large dams such as Tehri and Narmada; and public interest litigation.

The domain of environmentalism can be defined as a field of force in which different individuals and organizations, far removed in space, collaborate and sometimes compete in forging a movement that often transcends national boundaries. The movement is usually to preserve or sustainably utilize natural heritages and resources. Four strands in environmentalist ideologies can also be recognized: romantic appreciation of nature; rationalist management of natural resources; activism for environmental justice; and concern for inter-generational equity (which is very much embedded in the ancient environmental philosophy of India).

Looking into the genesis of environmental ethics, the first wave of environmentalism can be viewed as responding to European industrialization, expansion and encounter with tropical lands. The second wave is the rise of ecology as a field of knowledge and means to awareness of the environment as a complex biophysical entity. This second wave grapples with a powerful ecological problematic grounded on the following trends:

* world population is growing exponentially, without any counter trend in sight.
* economic processes currently underway are increasing the pressure per individual

upon the resource base.
* such exponential demand is unsustainable and will ultimately cause degradation of the environment.
* solutions require not merely new laws and taxes but a fundamental restructuring of lifestyles.
* production, consumption, and the very definition of social values have to change.

A the third wave or “southern challenge” within environmentalism can be defined as follows:
* a combination of concern for the environment with a concern for social justice
* a sense of moral urgency that is based in a sense of betrayal toward those who were responsible for protecting the land and lives of the poor.
* the gradual mobilization of popular support in the face of severe repression.
* the occasional emergence of direct collective action like road-blocks, strikes, attacks on government facilities, courting arrest, and public protest.
* the involvement of spiritual leaders like Gandhians in India, Buddhist monks in Thailand, and liberation theologists in Colombia or Peru.
* the active participation and leadership provided by women.
* new international networks and anti-globalization movements.

NATURE STUDY AND CHARACTER

from the Newsletter Editor

“Dear Boys and Girls, this little booklet is being set to you with the hope that it will awaken renewed interest and a manifest determination on your part to make a careful study of all the birds in the State.” So begins the introductory note from Katherine Craig, Colorado State Superintendent of Public Instruction, in a 70-page booklet titled *Bird and Arbor Day Studies for Colorado Schools*. Published in 1930, it apparently was sent out to grade school children throughout the state, along with lesson plans for teachers to encourage bird study and nature education generally. I came upon it in a dusty corner of a used book store. “Birds mean much to all of us in the way of rendering service, song, beauty and teaching us the virtues of life,” Superintendent Craig continued. “Who can look at the picture of an eagle without conceiving the idea of strength, courage and lofty ideals? Who can look at the picture of the dove without thinking of peach and love? Who can listen to the song of the lark and not be inspired to flights of fancy and dreams of beauty and happiness? Study the habits and nativity of these birds,” she concluded, “and awaken into new thoughts, higher ideals and greater joy.”

The booklet consists in a delightful mixture of science and poetry (some wonderful, some dreadful), lists of birds to be found in different habitats, color pictures of some of the more common ones, detailed descriptions of how to build bird feeders and astute suggestions for observing bird behavior. Essays and study questions aim at developing students’ powers of observation and description, and helping them organize their developing knowledge of the natural world. Aesthetic appreciation is encouraged, along with an understanding of the “economic benefits” of wildlife and the need for conservation.

Compared to our current science texts, the descriptions of birds often seem quite anthropomorphic. “The robins sing in the rain,” begins a typical description. “That fact gives a clue to the sort of birds they are–hardy, bold, fearless, irrepressible. You cannot keep a robin down. He is the perfect example of the sort of person anyone would like to make his friend and keep near him, of the genial and bubbling spirit that makes the world a pleasanter place in which to live.” Yet the description quickly

segues into an accurate discussion of robin behavior, ecological relations, and comparative morphology. The study questions for the robin included the following:
* What sort of bird character is the robin? What kind of song does he sing?
* To what well-known group of singing birds does the American robin belong? Name some of its cousins. Is the English robin a thrush?
* Where and of what do robins make their nests? How many eggs are laid? What fact of a bird's life is shown by the number of eggs it lays? What are some of the birds that lay fewer eggs than the robin? What birds lay more? Why?
* Market hunters used to shoot great numbers of robins. How was this stopped? What can be said of their present numbers?

Just as poetry and science coexist happily in this study booklet, so do religion and science. Back in 1930, separation of church and state in the schools was considerably laxer than it is today, and the booklet is filled with expressions of nature as God's creation. One poem titled "The Making of Birds" begins: "God made Him birds in a pleasant humor; Tired of planets and suns was He. He said: 'I will add a glory to the summer, Gifts for my creatures banished from me!'" At the same time, deep geological time is taken for granted and questions of bird evolution are pondered.

At a time when my state, like most, is consumed with a mania for increasing standardized test scores, and when our children often know more about the creatures of the South American rainforests than those in their neighborhoods, it is refreshing to read evidence of this earlier attempt to teach children about the wildlife all around them. "No means which will contribute to the desired end should be neglected," writes Superintendent Craig, including "mounted specimens, pictures of all kinds, true stories, poems," but "field trips are of greatest value." "Field note books can be made to add to the interest of the course, but the *bird* is the thing." Spoken like a true birder!

Perhaps the most interesting aspect of this little booklet, from the perspective of an environmental philosopher, is the connection between nature study and character development that it presupposes. it states: "At a meeting of the county superintendents of the State of Colorado, held October 16th, 1929, it was decided to stress CHARACTER TRAINING and BIRD STUDY in every school in the state in such a manner as to bring about definite requirements." At the same time as state teachers were asking their students to learn 25 to 30 of their native birds and write about them, they were memorizing "character training catechisms" and writing essays on such themes as "The Aim of Life," "Choosing One's Work" and "In What Does Man's Truest Greatness Lie?" At the same time that students voted on a state bird—the lark bunting, the voice of the plains, still Colorado's state bird—the schoolchildren of each county were choosing "county slogans" (Adams County: "Character is the Diamond that Scratches Every Other Stone," Park County: "Our Aim—To Learn to Live Well Together," and my favorite, Conejos County's "A Little More Kindness and Little Less Greed").The booklet shows that these two studies were considered complementary and indeed overlapping activities.

So three cheers for Katherine Craig! Her poetry was maudlin but her educational aims were true. I have no doubt that the children of Colorado grew up to be better men and women due to her efforts and I would gladly vote her in for another term as state superintendent of education.

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RECENT ARTICLES AND BOOKS

Thanks (again, as often before) to Mary Sealing, Fruita, Colorado, formerly with Colorado Division of Wildlife, for editorial help assembling the bibliography. Reminder: none of the compilers of this bibliography are omniscient, or infallible. You need to tell us about what is notable in the field, especially outside the usual periodicals and publishers. This especially includes your own publications, and especially international publications. Send to: Holmes Rolston. rolston@lamar.colostate.edu. The nearer it is to the format used here, the sooner it will be published. Items published in the Newsletter bibliography go onto the searchable website ISEE bibliography at: http://www.cep.unt.edu/bib/index.htm. Note that this website changed last October, though the server is still at the Center for Environmental Philosophy, University of North Texas. Update your browser.

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--Alig, Ralph J; Plantinga, Andrew J, "Future Forestland Area: Impacts from Population Growth and Other Factors that Affect Land Values", Journal of Forestry 102(no.8, December 2004):19-24(6).

--Alodos, CL; Pueyo, Y; Barrantes, O; Escos, J; Giner, L; Robles, AB, "Variations in landscape patterns and vegetation cover between 1957 and 1994 in a semiarid Mediterranean ecosystem", Landscape Ecology 19(no.5, 2004):545-561(17).

--Anthony, R., and Paul B. Thompson, "Biosafety, Ethics and Regulation of Transgenic Animals," in The GMO Handbook: Genetically Modified Animals, Microbes and Plants in Biotechnology. S.R. Barekh, Ed. Totoway, NJ: 2004, Humana Press, pp. 183-206.

--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).

--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).

--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.

--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.

--Bebbington, Anthony, "NGOs and uneven development: geographies of development intervention", Progress in Human Geography 28(no.6, December 2004): 725-745(21).

--Berry, Alison H; Hesseln, Hayley, "The Effect of the Wildland-Urban Interface on Prescribed Burning Costs in the Pacific Northwestern United States", Journal of Forestry 102(no.6, September 2004):33-37(5).

--Besley, John; Shanahan, James, "Skepticism About Media Effects Concerning the Environment: Examining Lomborgs Hypotheses", Society and Natural Resources 17(no.10, Nov-Dec 2004):861-880(20).

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

--Bigsby, Hugh, "Forest Valuation in New Zealand", Journal of Forestry 102(no.8, December 2004):32-38(7).

--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.

--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.

--Blom, Allard, "An estimate of the costs of an effective system of protected areas in the Niger Delta - Congo Basin Forest Region", Biodiversity and Conservation 13(no.14, December 2004):2661-2678(18).

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

--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.

--Botkin, Daniel B; Cummins, Kenneth W, "Clouds among the Ecological Visions", BioScience 55(no.1, January 2005):7-9(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.

--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.

--Burgi, Matthias; Hersperger, Anna; Schneeberger, Nina, "Driving forces of landscape change - current and new directions", Landscape Ecology 19(no.8, January 2005):857-868(12).--Burkhardt, Jeffrey, Gary Comstock, Peter G. Hartel, and Paul B. Thompson. Agricultural Ethics, CAST Issue Paper Number 29, February 2005. Council on Agricultural Science and Technology, Ames, IA, 12 pp.

--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.

--Cafaro, Philip. “Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics.” Reprinted in Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

--Cafaro, Philip. “Gluttony, Arrogance, Greed, and Apathy: An Exploration of Environmental Vice.” In Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005). Reprinted in Natur und Kultur 2004 (5/2): 3-28, in German.

--Cafaro, Philip. “Henry David Thoreau,” in S. Kretch, J. McNeill and C. Merchant (eds.), Encyclopedia of World Environmental History (Routledge): 1200-1202.

--Capitini, Claudia; Tissot, Brian; Carroll, Matthew; Walsh, William; Peck, Sara, "Competing Perspectives in Resource Protection: The Case of Marine Protected Areas in West Hawai`I", Society and Natural Resources 17(no.9, October 2004): 763-778(16).

--Chen, Jim, "Webs of Life: Biodiversity Conservation as a Species of Information Policy," Iowa Law Review 89(no. 2, 2004):495-608. Book-length article in law journal with hundreds of citations. The biosphere as an information platform. Touring the biosphere: layer by layer. Logic of conservation biology and adaptive ecosystem management, diversity and stability, restoration biology, "ecomathematics," legal mandates, "species and specimens, genes and memes," creation myths, environmental aesthetics. Touches on almost everything in biology, ecology, evolutionary natural history, environmental ethics, policy, all with the hope of finding bearings in law. Chen is in law, University of Minnesota Law School.

--Cheng, Joseph Y.S. and Zhang Mujin, "Historical Survey and the Cultivation of a New Culture Regarding the Ecology in China's Western Provinces," International Journal of Sustainable Development and World Ecology 11(2004):129-142. Extensive background analysis. China's leadership is giving priority to developing the Western Provinces, where environmental pollution and degradation are worse than in the provinces of the East. Here the blind imitation of the (World) West is striking, but there are Chinese environmentalists who seek a "new ecological culture." This plans for sustainable development and also includes respect for the environment, including intrinsic values in nature. Cheng is with the Contemporary China Research Project, University of Hong Kong. Zhang is at Tsing Hua University, Beijing.

--Clark, Eric, "The Ballad Dance of the Faeroese: Island Biocultural Geography in an Age of Globalisation," Tijdschrift voor Economische en Social Geografie 95(no. 3, 2004):284-297. In English. The Ballad Dance of the Faeroese (connected with local identity and whale slaughter) is taken as an example of cultural diversity blended with biodiversity, and the Faeroe Islands an example of a distinctive island culture encountering globalisation. What to make of boundaries, of island-ness in a global age? Historical studies of island biocultural geographies provide promising means for probing ties between biological and cultural diversity and enhancing our perceptions of co-evolution under globalisation. Clark is in the Department of Social and Economic Geography, Lund University, Lund, Sweden.

--Cockell, Charles S., "The Rights of Microbes," Interdisciplinary Science Reviews 29(2004):141-150. "A strong case can be made for microorganisms to be accorded special ethical status, as they represent the base of all food chains and of the major

biochemical cycles. Without lions there is life, but without microorganisms there can be no higher life forms. The notion of protecting individual microorganisms may be absurd, but microbial communities and ecosystems nevertheless deserve protection, and offer an example of the merits of a population based approach to environmental ethics. I argue that humankind should assume the position of a moral agent to the microbial world, by formally recognizing the intrinsic worth of microorganisms, as well as their utilitarian value to humans and to the rest of life on earth. The practical implications of such an ethic are discussed." Cockell is with the British Antarctic Survey, Cambridge, UK.

--Cohen, Michael P., "Blues in the Green: Ecocriticism under Critique," Environmental History 9(no. 1, 2004):9-36. "At bottom, ecocriticism needs to import scientific authority in order to combat two positions, 1) that culture can be a refuge from nature, and 2) that nature is merely a cultural construction." (p. 18) Cohen is well-known as an environmental author and is visiting professor of literature and environment at the University of Nevada, Reno.

--Cooke, Steven J; Cowx, Ian G, "The Role of Recreational Fishing in Global Fish Crises", BioScience 54(no.9, 1 September 2004):857-859(3). Exploitation of fishery resources has become a major conservation issue on a global scale. Commercial fisheries have been repeatedly blamed for the worldwide declines in fish populations. However, we contend that the recreational fishing sector also has the potential to negatively affect fish and fisheries. Here we present evidence to show that both recreational and commercial fishing sectors deserve consideration as contributors to the exploitation of fish in marine and inland waters. The lack of global monitoring and compiling of statistics on recreational fishing participation, harvest, and catch-and-release has retarded our ability to understand the magnitude of this fishing sector. Using data from Canada, we estimate that the potential contribution of recreational fish harvest around the world may represent approximately 12 percent of the global fish harvest. Failure to recognize the potential contribution of recreational fishing to fishery declines, environmental degradation, and ecosystem alterations places ecologically and economically important resources at risk. Elevating recreational fishing to a global conservation concern would facilitate the development of strategies to increase the sustainability of this activity.

--Cooper, David and Simon James. *Buddhism, Virtue and the Environment* (Ashgate, 2004). Buddhism, one increasingly hears, is an 'eco-friendly' religion. It is often said that this is because it promotes an 'ecological' view of things, one stressing the essential unity of human beings and the natural world. This book presents a different view. While agreeing that Buddhism is, in many important respects, in tune with environmental concerns, Cooper and James argue that what makes it 'green' is its view of human life. The true connection between the religion and environmental thought is to be found in Buddhist accounts of the virtues - those traits, such as compassion, equanimity and humility, that characterise the life of a spiritually enlightened individual. Central chapters of this book examine these virtues and their implications for environmental attitudes and practice. *Buddhism, Virtue and Environment* will be of interest not only to students and teachers of Buddhism and environmental ethics, but to those more generally engaged with moral philosophy. Written in a clear and accessible style, this book presents an original conception of Buddhist environmental thought. The authors also contribute to the wider debate on the place of ethics in Buddhist teachings and practices, and to debates within 'virtue ethics' on the relations between human well-being and environmental concern. Available from Ashgate Publishing in hardback (£50.00, ISBN:0 7546 3909 6) and paperback (£16.99, ISBN: 0 7546 3910 X).

--Covich, Alan P et al., "The Role of Biodiversity in the Functioning of Freshwater and Marine Benthic Ecosystems", BioScience 54 (no. 8, 1 August 2004):767-775(9). Empirical studies investigating the role of species diversity in sustaining ecosystem processes have focused primarily on terrestrial plant and soil communities. Eighteen representative studies drawn from post-1999 literature specifically examined how changes in biodiversity affect benthic ecosystem processes. Results from these small-scale, low-diversity manipulative studies indicate that the effects of changes in biodiversity (mostly synonymous with local species richness) are highly variable over space and time and frequently depend on specific biological traits or functional roles of individual species. Future studies of freshwater and marine ecosystems will require the development of new experimental designs at larger spatial and temporal scales. Furthermore, to successfully integrate field and laboratory studies, the derivation of realistic models and appropriate experiments will require approaches different from those already used in terrestrial systems.

--Czech, Brian, et al (20 others, including a study group of the Wildlife Society), "The Iron Triangle: Why The Wildlife Society Needs to Take a Position on Economic Growth," Wildlife Society Bulletin 31(no. 2, 2003):574-577. Powerful forces exist who do not want the public to think there is a conflict between economic growth and wildlife conservation. But there is, and wildlife professionals need to address that conflict. An "iron triangle" exists; one side is special interest groups, one side is supportive political factions, and the third side is professional agencies, usually in the government; the triangle locks out other views. Neoclassical economists typically argue that there is no conflict between economic growth and wildlife conservation, but ecological economists say there is. The Wildlife Society needs to speak up. Czech is a wildlife biologist with the U.S. Fish and Wildlife Service, National Wildlife Refuge System, and chair of The Wildlife Society's Working Group for the Steady State Economy.

--Dallmeyer, Dorinda G., ed., Values at Sea: Ethics for the Marine Environment. Athens: University of Georgia Press, 2003. Relatively little attention has been given to environmental ethics at sea, but the sea is largely unregulated by law; therefore at sea ethical conviction could be more important than on land. Fifteen papers by an interdisciplinary group of scholars. Marine life; indigenous peoples' knowledge and stewardship, endemic and exotic species, aquaculture, oil spills, species protection. Dallmeyer is in law, University of Georgia.

--Deckers, Jan, "Christianity and Ecological Ethics: The Significance of Process Thought and a Panexperientialist Critique of Strong Anthropocentrism," Ecotheology 9(no. 3, 2004):359-387. In recent years, Christian theologians have reconsidered our duties towards nonhuman entities by rethinking the God-humanity relationship. The way in which nonhuman nature is conceived has largely remained unchanged. The key to the development of an adequate ecological ethic lies in the casting aside of materialist and dualist conceptions of matter, and the adoption of panexperientialism. Weak speciesism is the required ethic. It places humans first, yet assigns great significance to other animals. It commits many humans to quasi-veganism. Deckers is Lecturer in Health Care Ethics, School of Population and Health Sciences, The Medical School, University of Newcastle, UK.

--Delwiche, Charles F, "The Genomic Palimpsest: Genomics in Evolution and Ecology", BioScience 54(no.11, November 2004):991-1001(11). Genomics is the discipline that has grown up around the sequencing and analysis of complete genomes. It has typically emphasized questions that involve the biological function of individual organisms, and has been somewhat isolated from the fields of evolutionary biology and ecology. However, genomic approaches also provide powerful tools for studying populations, interactions among organisms, and evolutionary history.

Because of the large number of microbial genomes available, the first widespread use of genomic methods in evolution and ecology was in the study of bacteria and archaea, but similar approaches are being applied to eukaryotes. Genomic approaches have revolutionized the study of in situ microbial populations and facilitated the reconstruction of early events in the evolution of photosynthetic eukaryotes. Fields that have been largely unaffected by genomics will feel its influence in the near future, and greater interaction will benefit all of these historically distinct fields of study.

--Desta, Solomon; Coppock D. Layne, "Pastoralism Under Pressure: Tracking System Change in Southern Ethiopia", Human Ecology 32(no.4, August 2004):465-486(22).

--Drake, John M; Bossenbroek, Jonathan M, "The Potential Distribution of Zebra Mussels in the United States", BioScience 54(no.10, 1 October 2004):931-941(11). The range expansion of zebra mussels (Dreissena polymorpha) in North America has been rapid and costly in both economic and ecological terms. Joint social, political, and scientific ventures such as the 100th Meridian Initiative aim to reduce the spread of zebra mussels by eliminating the unintended transport of the species and preventing its westward expansion. Here we forecast the potential distribution of zebra mussels in the United States by applying a machine-learning algorithm for nonparametric prediction of species distributions (genetic algorithm for rule-set production, or GARP) to data about the current distribution of zebra mussels in the United States and 11 environmental and geological covariates. Our results suggest that much of the American West will be uninhabitable for zebra mussels. Nonetheless, some catchments along the West Coast and in the southeastern United States exhibit considerable risk of invasion and should be monitored carefully. Possible propagule dispersal to these places should be managed proactively.

--Drake, John M; Keller, Reuben P, "Environmental Justice Alert: Do Developing Nations Bear the Burden of Risk for Invasive Species?" BioScience 54 (no. 8, 1 August 2004):718-719(2).

--Driscoll, Cathy, and Mark Starik, "The Primordial Stakeholder: Advancing the Conceptual Consideration of Stakeholder Status for the Natural Environment," Journal of Business Ethics 49(# 1, 2004):55-73. Stakeholder analysis in managerial decision-making typically includes only humans but it ought to include the natural environment as well. Analysis of who and what can count as a stakeholder; detailed survey of the literature. In addition to considerations of power, legitimacy, and urgency, a fourth dimension is proximity. By a comprehensive account the natural environment is the primary and primordial stakeholder of the firm. Driscoll is in management, Sobey School of Business, Saint Mary's University, Halifax, Nova Scotia. Starik is in strategic management and public policy, George Washington University School of Business and Public Management, Washington.

--Dudley, Joseph P, "Global Zoonotic Disease Surveillance: An Emerging Public Health and Biosecurity Imperative", BioScience 54(no.11, November 2004):982-983(2).

--Eggleston, J. E., S. S. Rixecker, and G. J. Hickling, "The Role of Ethics in the Management of New Zealand's Wild Mammals," New Zealand Journal of Zoology 30(2003):361-376. New Zealand's wild mammals are introduced species. Wildlife researchers and managers in New Zealand find animal welfare guidelines developed for captive and domestic animals unsuitable for this new context. The recommendation that New Zealand adopt an ecocentric ethic is also incomplete for this situation. The authors here propose a more comprehensive framework for considering ethical responsibility to New Zealands's introduced ungulates, and also for pest species. Under this framework some contemporary assumptions must be questioned,

such as justifying recreational hunting through the provision of an ecologically therapeutic role. The authors present a comprehensive process of ethical consideration in management decision-making for other introduced wild mammal species. Eggleston is in Philosophy and Religious Studies, University of Canterbury, Christchurch, New Zealand. Rixecker is in Environment, Society and Design Division, Lincoln University, Christchurch, NZ. Hickling is in Fisheries and Wildlife, Michigan State University, East Lansing.

--Ehrlich, Paul, "Human Natures, Nature Conservation, and Environmental Ethics," BioScience 52(no. 1, 2002):31-43. "There is general agreement among scientists that the accelerating loss of biodiversity should be a matter of great concern. They have concluded that nature must be conserved not just for its own sake but also for the sake of Homo sapiens, to which it supplies an indispensable array of ecosystem services. And for most of these scientists, and large numbers of environmentalists, conservation is a major ethical issue. ... But the seriousness of the human predicament is still unknown to the vast majority of the general public and decisionmakers worldwide. ... As a result the cutting edge of the environmental sciences is now moving from the ecological and physical sciences toward the behavioral sciences, which seem to have the potential to develop ways to improve that response." Ehrlich is in biology, Stanford University.

--Ehrlich, Paul R., "Bioethics: Are Our Priorities Right?" BioScience 53(no. 12, 2003):1207-1216. Neither biologists nor nonbiologists are paying adequate attention to the escalating ethical issues raised by the human predicament, and the expertise of biologists seems to demand they make additional contributions to environmental ethics, broadly defined. Massive environmental destruction and the development of biological and nuclear weapons have changed the world; cultural evolution of ethics has not kept pace. "Bioethics" must be expanded from its focus on medical issues to consider such things as the ethics of preserving natural capital for future generations and those of dealing with overconsumption. Bioethics should examine issues as diverse as the ethics of invading Iraq to increase the role of the rich in generating climate change and the ethics of the Lomborg affair. Achieving a sustainable global society will require developing an agreed-upon ethical basis for the necessary political discourse, and the time to start is now. Ehrlich is in biology, Stanford University.

--Elmendorf, Christopher S., "Ideas, Incentives, Gifts, and Governance: Toward Conservation Stewardship of Private Land, in Cultural and Psychological Perspective," University of Illinois Law Review 2003, no. 2, 423-505. Conserving ecological resources on private lands requires both supportive landowners and regulatory coercion, notwithstanding that rural landowners comprise the most consistently anti-environmental demographic group in America. Neither policymakers nor legal scholars have come up with satisfying responses to this predicament. One needs incentives, gifts, governance, and, above all, more ideas. Long law article with many citations. Elmendorf is Law Clerk, U.S. Court of Appeals for the Second Circuit, and University of California, Davis, School of Law.

--Farber, Daniel A., "From Here to Eternity: Environmental Law and Future Generations," University of Illinois Law Review 2003, no. 2, pages 289-335. An analysis of exponential discounting, placing a present day value on future harms, which may often have the effect of minimizing catastrophic events far in the future. Some form of discounting is appropriate, given that society cannot allocate finite resources equally over an infinite number of time periods. Farber is in law, University of California at Berkeley, also in law, University of Minnesota.

--Fenchel, Tom; Finlay, Bland J, "The Ubiquity of Small Species: Patterns of Local and Global Diversity", BioScience 54 (no. 8, 1 August 2004):777-784(8). Small organisms (less than 1 millimeter in length) tend to have a cosmopolitan distribution. This is a consequence of huge absolute population sizes rather than any inherent properties of particular taxonomic groups. At the local scale, the diversity of small species exceeds that of larger organisms, but at the global scale this relation is reversed, because endemism is largely responsible for the species richness of large organisms. For small organisms, the relationship between species and area is flat, and a latitudinal diversity gradient is absent or weak. These patterns are explained by some of the assumptions underlying the unified neutral community model.

--Fitzhugh, Thomas W; Richter, Brian D, "Quenching Urban Thirst: Growing Cities and Their Impacts on Freshwater", BioScience 54 (no. 8, 1 August 2004):741-7154(14). The development of water resources to satisfy urban water needs has had serious impacts on freshwater ecosystem integrity and on valuable ecosystem services, but positive trends are emerging that point the way toward a solution. We demonstrate this through case studies of water resource development in and around five large urban areas: Los Angeles, Phoenix, New York, San Antonio, and Atlanta. Providing freshwater ecosystems with the water flows necessary to sustain their health, while meeting the other challenges of urban water management, will require greatly increased water productivity in conjunction with improvements in the degree to which planning and management take ecosystem needs into account. There is great potential for improvement in both these areas, but ultimately water planners will also need to set limits on human alterations to river flows in many basins in order to spur greater water productivity and protect ecosystem water allocations before water supplies become overtaxed.

--Frasz, Geoffrey. “Benevolence as an Environmental Virtue.” In Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

--Gamborg, Christian; Rune, Flemming, "Economic and Ecological Approaches to Assessing Forest Value in Managed Forests: Ethical Perspectives", Society and Natural Resources 17(no.9, October 2004): 799-815(17).

--Geist, Helmut J; Lambin, Eric F, "Dynamic Causal Patterns of Desertification", BioScience 54(no.9, 1 September 2004):817-829(13). Using a meta-analytical research design, we analyzed subnational case studies (n 3D 132) on the causes of dryland degradation, also referred to as desertification, to determine whether the proximate causes and underlying driving forces fall into any pattern and to identify mediating factors, feedback mechanisms, cross-scalar dynamics, and typical pathways of dryland ecosystem change. Our results show that desertification is driven by a limited suite of recurrent core variables, of which the most prominent at the underlying level are climatic factors, economic factors, institutions, national policies, population growth, and remote influences. At the proximate level, these factors drive cropland expansion, overgrazing, and infrastructure extension. Identifiable regional patterns of synergies among causal factors, in combination with feedback mechanisms and regional land-use and environmental histories, make up specific pathways of land change for each region and time period. Understanding these pathways is crucial for appropriate policy interventions, which have to be fine-tuned to the region-specific dynamic patterns associated with desertification.

--Gerber, Leah R., et al., "Do the Largest Protected Areas Conserve Whales or Whalers?" Science 307(28 January 2005):525-526. There are huge ocean areas in southern oceans that are protected areas but a main problem is that whales migrate

out of these areas. New proposals from an International Whaling Commission study group. Gerber is in ecology, Arizona State University.

--Gezelius, Stig, "Food, Money, and Morals: Compliance Among Natural Resource Harvesters", Human Ecology 32(no.5, October 2004):615-634(20).

--Guichard, Frederic; Levin, Simon A; Hastings, Alan; Siegel, David, "Toward a Dynamic Metacommunity Approach to Marine Reserve Theory", BioScience 54(no.11, November 2004):1003-1011(9). Coastal habitats have recently received much attention from policymakers, but marine reserve theory still needs to integrate across scales, from local dynamics of communities to biogeographic patterns of species distribution, recognizing coastal ecosystems as complex adaptive systems in which local processes and anthropogenic disturbances can result in large-scale biological changes. We present a theoretical framework that provides a new perspective on the science underlying the design of marine reserve networks. Coastal marine systems may be usefully considered as metacommunities in which propagules are exchanged among components, and in which the persistence of one species depends on that of others. Our results suggest that the large-scale distribution of marine species can be dynamic and can result from local ecological processes. We discuss the potential implications of these findings for marine reserve design and the need for long-term monitoring programs to validate predictions from metacommunity models. Only through an integrated and dynamic global perspective can scientists and managers achieve the underlying goals of marine conservation.

--Hakansson, N, "The Human Ecology of World Systems in East Africa: The Impact of the Ivory Trade", Human Ecology 32(no.5, October 2004):561-591(31).

--Hamilton, KG Andrew, "Bugs Reveal an Extensive, Long-Lost Northern Tallgrass Prairie", BioScience 55 (no.1, January 2005):49-59(11). Only tiny remnants of unplowed natural meadows remain in the eastern part of the state of North Dakota, and in Canada from eastern Saskatchewan to Manitoba. Those west of Lake Manitoba and the Red River Valley are characterized by their distinctive fauna of insects, principally leafhoppers and planthoppers (Homoptera: Auchenorrhyncha). These true bugs include hundreds of species invariably associated with North American grasslands. The distributions of those with the most limited dispersal abilities reflect long-term patterns of dominance and contiguity of native grass stands in prairies. These bug distributions indicate that bluestem-dominated grasslands in Canada, which usually are under 0.5 meter (20 inches) in height, are equivalent to tallgrass prairie from Illinois. This prairie once extended as much as 400 kilometers (250 miles) northwest of its previously known distribution. These bugs help differentiate tallgrass prairie from sites in southwestern Manitoba and adjacent North Dakota, which are more arid, and from sites east of Lake Manitoba and southward in the Red River Valley, which were formerly oak savanna.

--Hargrove, Eugene. “Environmental or Ecological Citizenship through Culture-Specific Environmental Value Education.” Environmental Philosophy (Official Journal of the Korean Society for the Study of Environmental Philosophy) 3 (2004): 111-27. In English.

--Harmon, David, Biodiversity and the Sacred: Some Insights for Preserving Cultural Diversity and Heritage," Museum International 55(no. 218, 2003):63-69. Nature has been sacred since the dawn of human consciousness, and there is today a broadening range of spirituality, often interfused with the secular, that cannot easily be characterized as "faith," but regards nature as sacred. The sacred is a bridge between nature and culture. Scientists are often offering responses to why save nature that

make recourse to the idea of the sacred. Biologists call the creative process speciation, while theologians call it genesis, and they have very different explanations for it, but both have agreed that it is eminently valuable. Harmon is Executive Director, George Wright Society, an international professional association advancing the scientific and cultural values of protected natural areas and cultural sites.

--Harrington, Winston, Richard D. Morgenstein, and Thomas Stern, eds., Choosing Environmental Policy: Comparing Instruments in the United States and Europe. Washington, DC:RFF Press (Resources for the Future), 2004. Who has the best way to shape environmental policy? The United States, or Europe? The U.S. likes carrots on sticks, voluntary compliance, while Europeans lean toward more punitive governmental regulation. These contrasting strategies can lead to similar outcomes; both can have a place in the regulatory arsenal, depending on circumstances, and, depending on cultures in the U.S. and Europe. [Nevertheless, there is widespread judgment that the European Union has taken the lead in environmental responsibility, leaving the U.S. considerably behind, and even retrogressing under the Bush administration.]

--Hart, John, "Salmon and Social Ethics: Relational Consciousness in the Web of Life," Journal of the Society of Christian Ethics 22(2002):67-93. The extinction of salmon species provides bioregional stimuli for reflection on whether nonhuman species have intrinsic value or solely instrumental value, and the extent to which species preservation should have equitable status with, or take precedence over, human wants and needs. If societal needs and species conservation, and the common good of all creatures, are to be integrated for the good of the commons then a relational consciousness must replace "dominion" and "stewardship" attitudes toward creation. With discussion of whether this involves a concept of "rights" for salmon. Hart is in theology at Carroll College, Helena, Montana.

--Hatcher, Tim, "Environmental Ethics as an Alternative for Evaluation Theory in For-Profit Business Contexts," Evaluation and Program Planning 27(2004):357-363. The predominant context for evaluation in for-profit organizations is economics coupled with a distinctly anthropocentric worldview. Environmental ethics is a more sustainable theoretical foundation for evaluation in for-profit firms. This would help evaluators better establish professional integrity and create a deeper sense of solidarity with community, a more comprehensive view of the stakeholders in ethical decision-making. Hatcher is in Adult and Community College Education, North Carolina State University, Raleigh.

--Hill, Thomas Jr. “Ideals of Human Excellence and Preserving Natural Environments” Reprinted in Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

--Holdsworth, Deryck W, "Historical geography: the octopus in the garden and in the fields", Progress in Human Geography 28(no.4, 1 August 2004):528-535(8).

--Holeck, Kristen T et al., "Bridging Troubled Waters: Biological Invasions, Transoceanic Shipping and the Laurentian Great Lakes", BioScience 54(no.10, 1 October 2004):919-9129(11). Release of contaminated ballast water by transoceanic ships has been implicated in more than 70 of faunal nonindigenous species (NIS) introductions to the Great Lakes since the opening of the St. Lawrence Seaway in 1959. Contrary to expectation, the apparent invasion rate increased after the initiation of voluntary guidelines in 1989 and mandatory regulations in 1993 for open-ocean ballast water exchange by ships declaring ballast on board (BOB). However, more than 90 of vessels that entered during the 1990s declared no ballast on board (NOBOB)

and were not required to exchange ballast, although their tanks contained residual sediments and water that would be discharged in the Great Lakes. Lake Superior receives a disproportionate number of discharges by both BOB and NOBOB ships, yet it has sustained surprisingly few initial invasions. Conversely, the waters connecting Lakes Huron and Erie are an invasion hotspot despite receiving disproportionately few ballast discharges. Other vectors, including canals and accidental release, have contributed NIS to the Great Lakes and may increase in relative importance in the future. Based on our knowledge of NIS previously established in the basin, we have developed a vector assignment protocol to systematically
ascertain vectors by which invaders enter the Great Lakes.

--Houlahan, Jeff E; Findlay, C. Scott, "Estimating the `critical' distance at which adjacent land-use degrades wetland water and sediment quality", Landscape Ecology 19(no.6, August 2004):677-690(14).

--Hudson, Ray, "Conceptualizing economies and their geographies: spaces, flows and circuits", Progress in Human Geography 28(no.4, 1 August 2004):447-471(25).

--Ice, George G; Neary, Daniel G; Adams, Paul W, "Effects of Wildfire on Soils and Watershed Processes", Journal of Forestry 102(no.6, September 2004):16-20(5).

--Jax, Kurt and Ricardo Rozzi, "Ecological Theory and Values in the Determination of Conservation Goals: Examples from Temperate Regions of Germany, United States of America, and Chile," Revista Chilena de Historia Natural 77(2004):349-366. In English. An analysis of various kinds of conservation goals (biodiversity, ecotourism, cultural heritage, indigenous peoples). This analysis seeks that "nature and humans are brought together as much in the goals as in the processes of conservation," since" it is impossible to completely `isolate' protected areas from direct or indirect human influence." This often requires active management. Applied to conservation areas in Germany, the U.S. (Yellowstone) and Chile. Jax is with the UFZ Centre for Environmental Research Leipzig-Halle, Department of Conservation Biology, Leipzig, Germany. Rozzi is with the Omoro Ethnobotanical Park, Universidad de Magallanes, Puerto Williams, Chile, also in philosophy, University of North Texas.

--Jensen, Mari N, "Climate Warming Shakes up Species", BioScience 54 (no. 8, 1 August 2004):722-729(8). Every spring robins come bob, bob, bobbin along to Gothic, the former Colorado mining community thats now the site of the Rocky Mountain Biological Laboratory. This year they didn't even wait for spring-the first robin showed up on 13 March, more than a week before the spring equinox.

--Jepson, Jr., Edward J., "The Conceptual Integration of Planning and Sustainability: An Investigation of Planners in the United States," Environment and Planning C: Government and Policy 21(no. 3, 2003):389-410. A survey of over five hundred local planners to measure the extent to which an ecological definition of sustainable development is present in the planner's views and opinions. Much depends on their academic backgrounds and the state public policy context in which they work. There is much consistency in their views, but there is conflict particularly in relation to agriculture and natural areas open space, also in regard to private market forces that affect the use of the land. Jepson is in Urban and Regional Planning, Univ. of TN.

--Johnson, Cassandra Y., J. M. Bowker, John C. Bergstrom, and H. Ken Hull, "Wilderness Values in America: Does Immigrant Status or Ethnicity Matter?" Society and Natural Resources 17(2004):611-628. If wilderness is a social construction, then perhaps wilderness is valued by U.S. born whites, and not by immigrants and minorities. Surveys show that immigrants are less likely to value on-site wilderness

use. Blacks are also less likely to value on-site use, but are as likely as whites to value the continued existence of wilderness. Asians and Latinos are also less likely than whites to value on-site use. But there are some surprises. "U.-S. born Asians and women were more likely to indicate they believed the flora and fauna protected by wilderness had intrinsic value. ... The odds of an Asian respondent agreeing with this statement are about 3 times higher than for a White respondent, while a female is 1.63 times as likely to agree as a male" (p. 623).

Many differences are not statistically significant, beyond the fact that immigrant and minority groups expect to visit wilderness less, which may mostly be explained by the fact that they live in large cities and wilderness is not easy for them to visit. "For most of the value items, we cannot conclude that immigrants and natives perceive or construct wilderness in culturally different terms" (p. 624). On the basis of this study, the authors predict that "political support for wilderness may not diminish appreciably in the future as American becomes more diverse" (p. 625). Johnson, Bowker, and Hull are at the Southern Research Station, USDA Forest Service, Athens, GA; Bergstrom is in Agricultural and Applied Economics, University of Georgia.

--Journal of Philosophy of Education (The Journal of the Philosophy of Education Society of Great Britain), volume 37, no. 4, 2003, is devoted to environmental education. Michael Bonnett, editor, writes in the introduction: "At this state in history it is difficult to identify an issue of greater importance for humankind than its relationship with the environment, nor one that is more fraught. It must be a unique phenomenon--on Earth at least--for a species to be contemplating the possibility of its self-extinction. Yet as evidence mounts daily to confirm that human action is affecting the environment in ways that are both unprecedented and unsustainable, the issues raised appear ever more complex and the way ahead far from straightforward. Given that the consequences of this situation are having to be faced in increasingly acute forms by the citizens of the early twenty-first century, clearly it would be irresponsible for education somehow to attempt to remain aloof from the issues that this state of affairs throws up."

--Kant, Sashi and Susan Lee, "A Social Choice Approach to Sustainable Forest Management: An Analysis of Multiple Forest Values in Northwestern Ontario," Forest Policy and Economics 6(2004):215-227. Market value techniques for valuing forests are limited. Multiple forest values are closer to the concept of "social states" than market price or monetary value. A multiple values account tested in Northwestern Ontario. A need for developing context-specific social welfare maximizing inter-group preferences aggregation rules is highlighted. Kant and Lee are at the Faculty of Forestry, University of Toronto.

--Kargel, Jeffrey S., "Proof for Water, Hints of Life?" Science 306(3 December 2004):1689-1690. Recent Mars probes have established there was water, but whether there was (or is) life remains uncertain. Nevertheless, "given what we now know about Mars, planetary protection considerations require the assumption that martian life exists, until we learn otherwise. All possible care must be taken to avoid cross-contamination between Earth and Mars. ... The possible future discovery of life (or fossil life) beyond Earth, anticipated for millennia, would complete the Galilean revolution that removed Earth and its life from the center of the universe. Alternatively, if we search martian aqueous deposits and find them barren, then Earth might be seen as the only land of the living for light-years around. Methane and salts may then provide humans with raw materials for building a new civilization on Mars and with an increased respect for life on our own planet." Kargel is with the U.S. Geological Survey, Flagstaff, AZ.

--Karr et al., James R., "The Effects of Postfire Salvage Logging on Aquatic Ecosystems in the American West," BioScience 54(no. 11, 2004):1029-1033. Recent changes in the forest policies, regulations, and laws affecting public lands encourage postfire salvage logging, an activity that all too often delays or prevents recovery. In contrast, the ten recommendations proposed here can improve the condition of watersheds and aquatic ecosystems.

--Keltner, Dacher and Jonathan Haidt, "Approaching Awe, a Moral, Spritual, and Aesthetic Emotion," Cognition and Emotion 17 (no. 2, 2003):297-314. Two elements are central: (1) vastness, and (2) a need for accomodation, resulting from an inability to assimilate an experience into current mental structures. Variations involve threat, beauty, exceptional ability, virtue, and the supernatural. Analysis of what has been written in religion, philosophy, sociology, and psychology. Fleeting and rare, experiences of awe can change the course of a life in profound and permanent ways. With attention to awe in encounter with nature. Keltner is at University of California, Berkeley; Haidt is at the University of Virginia, Charlottesville.

--Kennedy, James J., and Niels Elers Koch, "Viewing and Managing Natural Resources as Human-Ecosystem Relationships," Forest Policy and Economics 6(2004):497-504. The increasing diversity, complexity and dynamics of ecosystem values and uses over the last 50 years requires new ways for natural resource managers (foresters, wildlife biologists, etc) to understand and relate to their professional roles and responsibilities. Three stages in Western-world natural resources management are identified: (1) Traditional stage, natural resources, first, foremost and forever, to (2) Transitional stage, natural resource management, for better or worse, involves people, to (3) Relationship stage: managing natural resources for valued people and ecosystem relationships. Kennedy is in Environmental Science, Wageningen University, Netherlands and Utah State University. Koch is at the Danish Forest and Landscape Research Institute, Hoersholm, Denmark.

--Kim, Sung-Jin. “Environmental History and the Origin of Ecological Crisis.” Environmental Philosophy (Official Journal of the Korean Society for the Study of Environmental Philosophy) 3 (2004): 89-109. In English.

--Kim, Sung-Jin. “The Philosophy Department of the Colorado State University and Prof. Holmes Rolston.” Environmental Philosophy (Official Journal of the Korean Society for the Study of Environmental Philosophy) 3 (2004) 127-52. In Korean.

--Kline, Jeffrey D; Alig, Ralph J; Garber-Yonts, Brian, "Forestland Social Values and Open Space Preservation", Journal of Forestry 102(no.8, December 2004):39-45(7).

--Kumagai, Yoshitaka; Carroll, Matthew S; Cohn, Patricia, "Coping with Interface Wildfire as a Human Event: Lessons from the Disaster/Hazards Literature", Journal of Forestry 102(no.6, September 2004):28-32(5).

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

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

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

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

--Lynch, Dennis L, "What Do Forest Fires Really Cost?", Journal of Forestry 102(no.6, September 2004):42-49(8).

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

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

--Minckley, W. L. et al., "A Conservation Plan for Native Fishes of the Lower Colorado River," BioScience 53 (no. 3, 2003):219-234. Native fish fauna of the Lower Colorado River, including four "big-river" fishes that are federally listed as endangered species, are inadequately protected. The authors propose a more realistic plan.

--Mitchell, Katharyne, "Geographies of identity: multiculturalism unplugged", Progress in Human Geography 28(no.5, 1 October 2004):641-651(11).

--Myers, Jeffrey, Converging Stories: Race, Ecology, and Environmental Justice in American Literature. Athens: University of Georgia Press, 2004. Racism and environmental destruction as convergent literary themes. Myers is in English, Manhattan College, Riverdale, NY.

--Normile, Dennis and Charles C. Mann, "Asia Jockeys for Stem Cell Lead," Science 307(4 February 2005):660-664. A major reason why Asian scientists are advancing in stem cell research is that "Asian countries are less encumbered by the ethical dilemmas that have hamstrung research in the West."

--Oksanen, Markku, and Juhani Pietarinen, eds., Philosophy and Biodiversity. Cambridge: Cambridge University Press, 2004. The nature and importance of biodiversity. What is worthy of protection or restoration and what is the acceptable level of costs? Is it permissible to kill sentient animals to promote native populations? Can species be reintroduced if they have disappeared a long time ago? How should the responsibilities for biodiversity be shared. Contributors: Markku Oksanen, Julia Koricheva, Helena Siipi, Yrjö Haila, Juhani Pietarinen, Kim Cuddington, Michael Ruse, Gregory M. Mikkelson, Finn Arler, Keekok Lee, Peter R. Hobson, Jed Bultitude, Kate Rawles, Christian Gamborg, Peter Sandoe, Robin Attfield.

--Olds, Kris; Hudson, Ray; Dicken, Peter, "Review of: Dicken, P. 1986: Global shift: industrial change in a turbulent world", Progress in Human Geography 28(no.4, 1 August 2004):507-515(9).

--Opdam, Paul, "Book Review of: Drafting a conservation blueprint. A Practitioner's Guide to Planning for Biodiversity Craig R. Groves. Island Press, Washington, DC, 2003", Biodiversity and Conservation 13 (no. 12, November 2004):2587-2588(2).

--Oreskes, Naomi, "The Scientific Consensus on Climate Change," Science 306(3 December 2004):1686. "Policy-makers and the media, particularly in the United States, frequently assert that climate science is highly uncertain. Some have used this as an argument against adopting strong measures to reduce greenhouse gas emissions. ... Such statements suggest that there might be substantive disagreement in the scientific community about the reality of anthropogenic climate change. This is not the case." All the major study groups concur that the present warming trends are human-caused. In a review of 928 papers, 75% either explicitly or implicitly endorsed the consensus view, 25% took no position. Not one paper disagreed with the consensus position. Oreskes is in the Department of History and Science Studies Program, University of California, San Diego.

--Oughton, Deborah, "Protection of the Environment from Ionising Radiation: Ethical Issues," Journal of Environmental Radioactivity 66(2003):3-18. Some main ethical issues concerning the protection of the environment from radiation. Issues of harm and monetary valuation. Difficulties with scientific uncertainty and applications of the precautionary principle. Issues concerned with the distribution of risk and its relevance for participation in decision-making. There are strong ethical grounds to provide for the protection of the environment and, all other things being equal, there is no reason to treat ionising radiation differently from other environmental stressors. Well-grounded in ethical theory. Oughton is in chemistry and biotechnology, Agricultural University of Norway, Aas.

--Paasi, Anssi, "Place and region: looking through the prism of scale", Progress in Human Geography 28(no.4, 1 August 2004):536-546(11).

--Peverelli, Roberto, "Un'etica della terra. La riflessione filosofica di Holmes Rolston, III [The Land Ethic: Philosophical Reflections of Holmes Rolston, III], Aut Aut: rivista di folosofia e di cultura, Issue 316-317, July-October, 2003, pages 116-138. In Italian. This issue also contains "Il fiume di vita: passato, presente e futuro," pages 139-144. a translation of Rolston's "The River of Life: Past, Present, and Future," [originally in Ernest Partridge, ed., Responsibilities to Future Generations (Buffalo, NY: Prometheus Books, 1981), pp. 123-132].

--Pimentel, David et al., "Water Resources: Agricultural and Environmental Issues", BioScience 54(no.10, 1 October 2004):909-918(10). The increasing demands placed on the global water supply threaten biodiversity and the supply of water for food production and other vital human needs. Water shortages already exist in many regions, with more than one billion people without adequate drinking water. In addition, 90 of the infectious diseases in developing countries are transmitted from polluted water. Agriculture consumes about 70 of fresh water worldwide; for example, approximately 1000 liters (L) of water are required to produce 1 kilogram (kg) of cereal grain, and 43,000 L to produce 1 kg of beef. New water supplies are likely to result from conservation, recycling, and improved water-use efficiency rather than from large development projects.

--Pimentel, David S., and Peter H. Raven, "Bt Corn Pollen Impacts on Nontarget Lepidoptera: Assessment of Effects in Nature," Proceedings of the National Academy of Sciences 97(no. 15, July 18, 2000):8198-8199. The effect of Bt corn on butterfly populations appears to be relatively insignificant, compared with other considerations. Bt corn permits reduced use of pesticides and the use of pesticides required with non Bt corn (especially to kill the corn rootworm) has worse environmental effects. Some 35% of food sold in U.S. supermarkets has detectable pesticide residues, an undesirable effect. Pesticides cause the death of 70 million birds a year and kill billions of insects, beneficial as well as harmful, each year. The beneficial insects are vital to fruit and vegetable pollination, useful biological control agents, and many others. Such environmental losses, due to pesticide killing of beneficial insects, are estimated at $1 billion a year. Pimentel is in entomology, Cornell University. Raven is at the Missouri Botanical Garden, St. Louis.

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--Ripple, William J; Beschta, Robert L, "Wolves and the Ecology of Fear: Can Predation Risk Structure Ecosystems?" BioScience 54 (no. 8, 1 August 2004):755-766(12). We investigated how large carnivores, herbivores, and plants may be linked to the maintenance of native species biodiversity through trophic cascades. The extirpation of wolves (Canis lupus) from Yellowstone National Park in the mid-1920s and their reintroduction in 1995 provided the opportunity to examine the cascading effects of carnivore-herbivore interactions on woody browse species, as well as ecological responses involving riparian functions, beaver (Castor canadensis) populations, and general food webs. Our results indicate that predation risk may have profound effects on the structure of ecosystems and is an important constituent of native biodiversity. Our conclusions are based on theory involving trophic cascades,

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--Rivera-Monroy, Victor H et al., "A Conceptual Framework to Develop Long-Term Ecological Research and Management Objectives in the Wider Caribbean Region", BioScience 54(no.9, 1 September 2004):843-856(14). The Caribbean Sea and its watersheds show signs of environmental degradation. These fragile coastal ecosystems are susceptible to environmental impacts, in part because of their oligotrophic conditions and their critical support of economic development. Tourism is one of the major sources of income in the Caribbean, making the region one of the most ecotourism dependent in the world. Yet there are few explicit, long-term, comprehensive studies describing the structure and function of Caribbean ecosystems. We propose a conceptual framework using the environmental signature hypothesis of tropical coastal settings to develop a series of research questions for the reef-sea-grass-wetland seascape. We applied this approach across 13 sites throughout the region, including ecosystems in a variety of coastal settings with different vulnerabilities to environmental impacts. This approach follows the strategy developed by the Long Term Ecological Research program of the National Science Foundation to establish ecological research questions best studied over decades and large spatial areas.

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--Sandler, Ronald and Philip Cafaro (eds.). Environmental Virtue Ethics. Lanham, MD: Rowman and Littlefield, 2005. A collection of ten original and four reprinted essays discussing environmental virtue ethics—the first anthology on this topic. Essays discuss the role that virtue and character have traditionally played in environmental discourse and reflect upon the role that it should play in the future. With sections on environmental virtue ethics theory, particular environmental virtues and vices, and applying environmental virtue ethics to particular environmental issues. Contributors include: Philip Cafaro, Geoffrey Frasz, Thomas Hill Jr., Holmes Rolston III, Ronald Sandler, David Schmidtz, Bill Shaw, Charles Taliaferro, Louke van Wensveen, Peter Wenz, Laura Westra and Matt Zwolinski.

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--Sinha, Rajiv K., Margaret Greenway, Green Technologies for Environmental Management and Sustainable Development. New Delhi, Akhil Books, 2004. Website: www.akhilbooks.com E-mail: info@akhilbooks.com. Technologies of the 20th century promoted rapid socio-economic development and improved the quality of life of the people. But it was not without a price. All the basic life-support systems on earth-air, water and food-started getting poisoned in the wake of material development threatening our sustainability and survival. This called for a change in the strategy of development and the technologies applied. Sustainable human society on earth with "good quality of life for all" can be achieved either by persuading people to change their behaviour and attitude to life and give up the culture of consumerism or by promoting sustainable development programmes with appropriate environmental technologies. Rajiv K. Sinha is teaching environmental science/technology at the School of Environmental Engineering, Griffith University, Brisbane, Australia. He was formerly teaching similarly in India. Margaret Greenway is Associate Professor and an Ecological Engineer, School of Environmental Engineering at Griffith University, Australia.

--Soderholm (Söderholm), Patrick, and Thomas Sundqvist, "Pricing Environmental Externalities in the Power Sector: Ethical Limits and Implications for Social Choice," Ecological Economics 46(no. 3, 2003):333-350. The ethical limits of the economic valuation of environmental impact of various power generation sources. The economic valuation can only partly model moral values, although these values are essential in the preferences that people make. The challenge lies not in discovering what private preferences are, but in promoting a public discourse in which such values are formed and registered. Such economic valuation needs to be set in a more comprehensive non-market valuation framework. The authors are in economics, University of Luleà, Sweden.

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--Stuart, Simon N., et al (6 others), "Status and Trends of Amphibian Declines and Extinctions Worldwide," Science 306(3 December 2004):1783-1786. A global census shows that most of the 5,743 known amphibian species are in decline and one-third are currently endangered. Amphibians are more threatened and are declining more rapidly than either birds or mammals. Although many declines are due to habitat loss, other, unidentified processes are driving species quite quickly to extinction. The lead author (and several of others) are with the IUCN Species Survival Commission/Conservation International Center for Applied Biodiversity Science, Biodiversity Assessment Unit, Washington, DC.

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--Tarrant, Michael A., H. Ken Cordell, and Gary T. Green, "PVF: A Scale to Measure Public Values of Forests," Journal of Forestry 101(no, 6, 2003):24-30. A 12-point scale for measuring the relative importance of national forest resources, both economic and nonecomomic, to the American public. There are three latent factors: protection, amenity, and outputs. In surveys, protection values are significantly higher for women, urban residents, and younger respondents. Decisions that fail to include economic nonuse values in benefit-cost analyses may underestimate the total value of forest protection. Over the past 40 years, there has been a paradigm shift toward a more inclusive orientation that recognizes both economic and noneconomic values. Tarrant is in forest resources, University of Georgia, Athens. Cordell and Green are with the USDA Forest Service, Southern Research Station, Athens, GA.

--Thomas, Frank, "Book Review of: Human Ecology and Community. Edited by Robert J. Gregory. (2003). Kamla-Raj Enterprises, Delhi, India, 2003", Human Ecology 32(no.5, October 2004):647-648 (2).

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--Tovey, Hilary, "Theorising Nature and Society in Sociology: The Invisibility of Animals," Sociologia Ruralis (European Society for Rural Sociology) 43(no. 3, 2003):196-215. Despite an increasing intellectual and social interest in the animals question in recent decades, animal remain largely invisible in social science texts. Even in environmental sociology texts, animals figure largely as biodiversity or wild species. Sociology tends to absorb animals into wild nature with virtually nothing to say about the huge numbers of domestic, service, or function animals; and it tends to recognize animals only in the form of generic types, without individual character or experience. In rural life, animals, especially domestic animals, are central to human society in a range of ways. Relations between farms and their animals are important for the formation of farmer identity and local farming culture. Animals are a key element in rural-urban relationships. Rural sociology needs to start developing its own approach to including animals in theorising society. Tovey is in sociology, Trinity College, Dublin.

--van Bogaert, Louis-Jacques, "Sentience and Moral Standing," South African Journal of Philosophy 23(no. 3, 2004):292-301. Sentience is often used in the advocacy of animal rights and welfare, but sentience is not a simple but a complex phenomenon and requires closer analysis. Sentience is more than feeling pleasure and pain and pain is an inborn protection required to fit into the world rather than the substance of evil. Various accounts of the nature of sentience. Sentience is often altered or reduced by advocates to fit the argument. Sentience comes across a spectrum and in degrees. The emphasis on pain in sentience leads to misunderstanding. The paper also addresses issues in abortion. van Bogaert is in philosophy, University of Stellenbosch, South Africa.

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--Zaikowski, Lori A; Garrett, Jinnie M, "A Three-Tiered Approach to Enhance Undergraduate Education in Bioethics", BioScience 54(no.10, 1 October 2004):942-949(8). The systematic integration of ethics into undergraduate programs is a key component to improving the understanding of ethical issues in science for a broad audience. We propose a three-tiered approach to integrating ethics and social issues that can be readily adapted to particular curricular needs. A concerted incorporation of ethics strategically targeted to each level of undergraduate education will improve the preparation of prospective research scientists, enhance K-12 teacher training, increase the scientific and ethical literacy of the general public, and improve the awareness of health professionals regarding ethics in medicine. After examining textbooks, programs, and faculty perspectives, we suggest areas in which changes can be made to incorporate ethics into undergraduate education.

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ISSUES

ANWR. As I write these words, the U.S. Senate has just voted 51-49 to allow oil drilling in the Arctic National Wildlife Refuge, one of the most spectacular wilderness areas in North America. Although Congress still needs to reconcile the House and Senate budget resolutions and last minute maneuvers remain possible, plans for energy development will likely go forward. This enacts the centerpiece of George Bush's pro-industry energy policy and deals a crushing blow to U.S. environmentalists.

Among other things, this vote signals the continued decline of environmentalism in the United States and the passing of environmental leadership to other countries. While falling behind in many areas, the U.S. has remained relatively strong in wilderness preservation. The loss of ANWR and other wild lands in the western U.S. to energy development in the past few years suggests that the U.S. has passed the point at which it can increase protection for wild lands while simultaneously developing an ever more consumption-oriented, ecologically toxic society.

Placed as it is within the context of developing a national energy strategy, the ANWR vote suggests that if the choice is between consuming or protecting nature, the American people will choose to consume it. Some environmentalists may point to polls that say most Americans would prefer to protect ANWR, and to the fact that the Bush energy strategy has been drafted primarily by the administration's cronies in the energy industry. But this may be grasping at straws. This administration's anti-environmental policies do not seem to have cost it significant public support. Whether or not these policies accurately reflect a weakening of support for environmentalism, at a minimum they reflect the general public's indifference to environmental protection. (PJC)

A new law in Britain could send animal-rights activists to jail for up to five years if by protests they cause economic harm to businesses that provide supplies or services to animal research organizations. The proposed law is under debate in Parliament. The law would also prohibit demonstrations in front of residences. See Gretchen Vogel, "Proposed Law Targets Animal-Rights Activists," Science 307(4 February 2005):659.

Big chill for small Gulf creatures. ConocoPhillips Co. wishes to build a liquefied natural gas terminal eleven miles offshore of Dauphin Island, south of Mobile, Alabama, in the Gulf of Mexico. Imported natural gas arrives liquified at minus-260 degrees and has to be warmed to a gaseous state before it can be put into pipelines for U.S. consumption. ConocoPhillips wishes to use seawater to warm the liquified gas (6 million gallons of seawater per hour). Such terminals are thought to be safer than onshore terminals in populated areas, but this chilling of the sea water sterilizes it, killing eggs and larvae of the next generation of the most important commercial and sport fish (as well as everything else) in the Gulf of Mexico. The U.S. Coast Guard and the National Marine Fisheries Service have radically disagreed about the proposal. The Coast Guard says the overall effect on the Gulf would be minor. The National Marine Fisheries Services says the effect could be serious, and that the Coast Guard has inadequate data. See Ben Raines, "Big Chili Could Kill, Federal Scientists Say," Mobile Register, March 1, 2005, p. 1A, 4A. (Thanks to Anne Holt, Mobile, AL.)

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