

USSEE Newsletter

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Society News

Two Board Members Elected

Brent Haddad and Valerie Luzadis were elected to the Board of Directors in December 2001 for two-year terms. The society thanks Trista Patterson, Brian Czech, and Paul Baer for being candidates and encourages them to be candidates in the future.

USSEE Second Biennial Conference — First Announcement and Call for Abstracts

The second biennial conference of the United States Society for Ecological Economics will be held May 22 -24, 2003 at the Sheraton Hotel & Conference Center, Saratoga Springs, New York (www.sheraton.com/saratogasprings).

Mark down the dates, start thinking about paper topics, or even plan a holiday around the history and beauty of Saratoga Springs. Located just north of the Albany capital region, Saratoga is world-renowned for its natural springs, cultural amenities, historical landscape, and recreational opportunities. At the foothills of the 6 million acre Adirondack Park, Saratoga is also accessible to the largest park in the contiguous United States. The city is just 20 minutes north of the Albany International Airport. The Sheraton is offering a special USSEE rate of \$119 per night (1-4 people), so plan ahead and reserve your room now at 518-584-4000.

Inquiries or abstracts for presentations should be directed by e-mail to Jon Erickson at Rensselaer Polytechnic Institute (erickj@rpi.edu). Abstracts will be selected based on originality and relevance to ecological economics. Please limit the text to 300 words along with the following ordered information within the body of an e-mail: 1. title, 2. author(s), 3. affiliation(s), 4. abstract, 5. four key words, 6. indication of paper or poster session, 7. audio-visual requirements, 8. presenting author contact information.

General conference information and periodic updates can be found at the USSEE's web page at: (www.ussee.org). (Jon Erickson, erickj@rpi.edu)

Report on ISEE Developments

Greetings to USSEE members. I'm pleased to have this opportunity to bring you up to date with some recent ISEE developments. The most important ISEE event this year was the Biennial Conference in March, held in Sousse, Tunisia. The conference was quite well attended, though it was

noticeable that the contingent from North America was much reduced from previous meetings. This I put down almost entirely to the events of 11th September 2001, though it was recognized that the date would interfere with teaching commitments. However, this was equally true for Europe, but European attendance was very high.

The conference went well, with an impressive number of presentations. Colleagues tell me the quality of the talks was high, but as I've discovered, the president doesn't get to go to many of these – the load of business meetings is just too high!

At Sousse the new ISEE Board held its first face-to-face meeting. We settled on Montreal, Canada, for the next Biennial Conference in 2004. It is an attractive city with excellent conference facilities and is easily accessible from just about anywhere. We have made a preliminary commitment to hold the 2006 meeting in Delhi, India. Following our recent meeting in Africa and two earlier meetings in Latin America, this will be our first foray into Asia. The conference committee is chaired by Charles Perrings (ISEE President-Elect) with the committee being composed of some ISEE Board members and representatives of USSEE and CANSEE.

Three ISEE Committees were also formally launched at Sousse: Communications (Chair – Kate Brown), Education (Chair – Paula Antunes), and Research (Chair – Kanchan Chopra). Once the memberships of these committees have been established, full details of their proposed programs of work will be posted on the ISEE website (www.ecologicaleconomics.org).

The ISEE Board had a useful meeting with representatives of the regional societies and made progress on several issues. All regional societies were positive about giving reduced rates for their meetings to all ISEE members, not just those of their regions. It was agreed that further work was needed on an integrated charging scheme for joint ISEE-regional society membership dues, and I shall be presenting a document on this to the ISEE Board and the regional societies in a few weeks. It was also agreed that the way ISEE Board and presidential candidates are nominated needs further clarification, and this too will be the subject of a document I shall present shortly.

A very important development at Sousse was a move by African colleagues to form an African Society for Ecological Economics that will be affiliated with ISEE. The ISEE Board is facilitating this development, and the initiators in Sousse have been put in contact with other African ecological economists.

The most pleasing thing for me about the Sousse meeting was the presence of a high proportion of young researchers, full of ideas and enthusiasm. This certainly bodes well for our subject and our society! (John Proops, ISEE President, Keele University, UK, eva10@keele.ac.uk)

News and Views

Colleges Implement Environmental Focus

A growing number of colleges have added environmental studies or environmental science programs to their curricula. Some however, have gone further than that. These colleges generally referred to as Environmental Liberal Arts Colleges, have implemented an environmental focus across their

curriculum and co-curricular life. The core group of ELA colleges are: College of the Atlantic in Maine, Green Mountain College in Vermont, Northland College in Wisconsin, Prescott College in Arizona, and Warren Wilson College in North Carolina.

Their specific strategies for implementing their environmental visions vary. College of the Atlantic, the smallest of the ELA colleges, offers environmentally focused majors and a strong applied research and context focus. Green Mountain College offers 26 majors but may well have the most consistent curricular environmental approach. Four required liberal arts or general education courses comprise the college's environmental core. Instead of taking an introductory English course first semester first year students take "Images of Nature" followed by "Voices of Community," writing intensive courses focused on the social and cultural environment. The required science course is called "Dimensions of Nature," and the social science senior year capstone course, "A Delicate Balance," focuses on the balance between human and non-human needs. Students complement these core courses with a series of course electives that are also focused on the natural, social, and cultural environments. Green Mountain College also maintains a students-run organic farm and the popular Green MAP office, which offers hiking, climbing, and other outdoor activities that follow the "leave-no-trace" principle. Warren Wilson's organic farm and strong work program provide opportunities for applied research and study with a commitment to environmental and social responsibility. Northland's Sigrud Olsen Institute offers focal points for regionally based research and education with a particularly strong science focus. Prescott College offers its three types of environmentally focused degree programs as Resident Degree, the Long Distance Degree Program and Masters of Art Program.

Despite these differences, all five colleges have a strong commitment to a regional focus in common that emphasizes applied work and a focus on the context of education and sustainable living rather than on individual abstract subject areas. Not surprising, all five colleges have made a commitment to sustainable living in their campus facilities and operations. This commitment to implementation, interdisciplinary, and context focuses resonates strongly with ecological economics. Seeking input from undergraduate students trained in and committed to the principles of an environmental liberal arts education may be tremendously stimulating to ecological economics and more specifically to the US Society for Ecological. (Sabine U. O'Hara, Green Mountain College, OHaraS@greenmtn.edu; email next semester: ohara@cord.edu)

Open Forum

Global Warming Economics

Modeling the socio-economic impact of climate change is a balancing act between simplification and sophistication. A generation of climate-economy models has been critiqued on the basis of what they omit. However, equally important is the neoclassical economic framework on which they were built. The use of optimal control models, originally designed to describe the allocation of market goods and productive inputs, are limited in capturing the social and environmental context of greenhouse gas policy.

In the 9 November 2001 issue of *Science* William Nordhaus investigates the economic efficiency of the Kyoto Protocol (*Science* **294**, 1283). The RICE modeling framework, like its predecessor

(Nordhaus, *Science* **258**, 1315 [1992]), analyzes policy scenarios based on their divergence from an efficient emissions reduction path. Setting aside a critique of a highly simplified model climate, its standard economic assumptions alone may contradict social and biophysical reality. These include: (i) the public good of climate as an economic commodity subject to the same trade-offs as, say, choosing between a new car or a new boat; (ii) the welfare of society as the sum of discounted per capita consumption; (iii) economic production from the allocation of infinitely available productive inputs with fully known technological advancement; and (iv) the externality of climate change completely captured by its interference with the production of consumer goods, each valued to society by their price-weighted contribution to per capita consumption.

Many natural and social scientists see these assumptions as problematic (E.O. Wilson, *Consilience*, Knopf, New York, 1998). The discipline of ecological economics views the human economy as dependent on the function of social institutions and bio-physical complexity. An interdisciplinary perspective argues for well-defined limits to substitution between market and non-market goods, and human welfare based on diverse economic, social, and environmental resources. Neoclassical optimization models can help inform climate policy, but should be viewed in the full light of their assumptions. (Jon Erickson, Rensselaer, erickj@rpi.edu; John Gowdy, Rensselaer, LGowdy@aol.com)

Sustainability: No Baloney

As an environmental analyst with a physics background, I am usually irate over how most "sustainability plans" pay only lip service to what an ecologist or resource analyst would consider an adequate definition of the term. On the other hand, I respect how difficult it is to apply high principles in the real world of every day economics and politics.

Just a few weeks ago the Student Planning Organization at the University of Illinois invited essays for a special sustainable development issue of their publication *UPwords*. My piece was called "Sustainability: Indicators and No Baloney." Below is the no baloney part. Thanks to Raymond Kan for encouraging me to do this, and apologies to him for this partial excerpting. "Sustainability" begs for serious environmental concern and purview. Planners, please dig deeply into (possibly old, but no less valid) issues such as the following.

Footprint. Put off-site impacts into planning. Know and react to the facts that New York City's water comes 100 miles from the Catskill Mountains; that in Illinois our vegetables come from Mexico, Holland, and Israel; our clothing from Sri Lanka; our lumber from Canada; our fuel from Saudi Arabia; etc.; that Champaign-Urbana's ecological footprint is ca. 150 times its incorporated area, and 4 times the size of Champaign County; that humanity's footprint (likely) exceeds the productive area of earth and that it (likely) represents accruing environmental debt. Consider how to put this into on-the-ground planning.

The automobile. What does it take to truly do something about the car besides "get used to it?" Evidence shows that for affluent folks like us, public ground transport is too expensive even when it is free. The Transport Economics Institute in Oslo has concluded that Norwegians will get out of cars into public transport only when the car trip is slower—this in a city with \$4/gal gasoline, time-of-day driving fees, and good public transport. The University of California, Berkeley, Transportation

Research Center says that free parking is a fertility drug for cars. Accept that back-pressure on cars is necessary to pry people out of them. Understand the traffic-stimulating effect of road-building. Understand how stringent measures must be in order to work.

Optimum size for Champaign-Urbana, or anywhere. The "smart growth" debate in many ways is just about growth per se. Are they quantitatively different? Is an upper limit a workable idea? Is Boulder's green belt a success or a stimulus to leap-frogging, and is leap-frogging just a way to deny limits?

Thresholds, lags, dynamics. Two days ago I listened to a zoning variance petition at the Champaign Planning Commission. One issue was a five-foot masonry wall to shield residents from debris, traffic noise, and headlight glare on Prospect Avenue. Presently three-foot walls are allowed, as are wooden fences up to six-feet. On the one hand this makes sense; a valid attempt to reclaim the residential experience from the intrusion of traffic. On the other hand, it is the final step in making the world intolerable for pedestrians and cyclists, who now will be confined tunnel-like between a wall and the street. A particularly bad example of this is on the north side of Windsor Road west of Mattis Avenue. This exemplifies an unstable interaction, in which more traffic means less walking and biking, which means still more traffic, all locked in a positive-feedback loop. The principle applies in many cases: neighborhood vs. centralized shopping, downtown vitality, fighting the "soccer-parent" syndrome, etc. Please learn how to anticipate, interpret, and redirect these undesirable dynamic effects.

Planners' power. How much power and influence do planners have? Sustainability is crucial and it will be accomplished by planning, but are professional planners the ones to do it? Or will it come politically through pressure from non-governmental organizations? Or what? (Robert A. Herendeen, Illinois Natural History Survey, herendee@uiuc.edu)

Education

New Master's Program in Ecological Economics

The School of the Environment at the University of Leeds in Britain has initiated a master's in ecological economics. The program coordinator is Sigrid Stagl, a recent Ph.D. graduate from Rensselaer's ecological economics program. The first group of students will commence their programs of study in September 2002. For details see website www.env.leeds.ac.uk/teaching/postgraduate.html or email Sigrid Stagl at s.stagl@env.leeds.ac.uk. (Carl McDaniel, mcdanc@rpi.edu)

Environmental Valuation in Europe (EVE)

The objective of EVE, a thirty-month project, was a concerted action "to analyze effective methods for expressing the values associated with environmental goods and services, ecosystem functions and natural capital, with a view to the achievement of the goals summarised in the concept of sustainability." An outcome of EVE is a set of eleven EVE Policy Research Briefs that were produced by Clive Spash and Claudia Carter. These briefs are the synthesis of a series of workshops that brought together an interdisciplinary team of European researchers beginning in June of 1998.

Each brief focuses on a coherent set of terms, concepts, and ideas that are relevant in seeking ways toward sustainability. The briefs are:

1. The Concerted Action on Environmental Valuation in Europe (EVE): An Introduction
2. Conceptualising and Responding to Complexity
3. Natural Capital
4. Conceptions of Value in Environmental Decision-Making
5. Conceptualising Sustainability
6. Property, Rights and Fairness
7. Environmental Quality, Health and the Value of Life
8. Value Transfer and Environmental Policy
9. Greening National Accounts
10. Participatory Approaches to Environmental Policy
11. Environmental Valuation in Europe: Findings from the Concerted Action

These briefs could be the core material for a course in ecological economics with the instructors supplementing them with relevant research and review papers. In the briefs, the authors do not shy away from hard (impossible) issues and accept that our ignorance plays a key role as do ethics and the thorny issues of fairness and complexity.

More information can be found at www.landecon.cam.ac.uk/eve/ or by contacting Charlene Nash at c.nash@nacaulay.ac.uk. (Carl McDaniel, mcdanc@rpi.edu)

Ph.D. fellowship opportunity

The University of California Santa Barbara has five years of National Science Foundation funding to support graduate students in a new degree program in Economics and Environmental Science. Support can only go to US citizens or greencard holders as per NSF rules. In this multidisciplinary program students study economics with an emphasis in one of four areas of natural science: applied ecology (led by Frank Davis), climate (led by Jeff Dozier), hydrology (led by Tom Dunne) or marine science (led by David Siegel). Professor Charlie Kolstad is director of the new program. Students need not have any economics background to apply, although a demonstrated interest in economics is important. For more information see: www.bren.ucsb.edu/programs/envecon/ or call 1-866-4-UC-BREN. (Jeff Dozier, U of CA Santa Barbara, dozier@bren.ucsb.edu)

Tufts environmental teaching modules updated

The Tufts University Global Development and Environment Institute has updated, with extended copyright release, its environmental teaching modules. If you are assigning these modules to students, they can access the latest versions at <http://ase.tufts.edu/gdae/echapterswelcome.htm> (topical chapter modules) or <http://ase.tufts.edu/gdae/modules/modstudent.html> (introductory modules). Module topics are: valuing the environment, population and the environment, agriculture and the environment, the economics of energy, the economics of global climate change, trade and the environment, macroeconomics and the environment, microeconomics and the environment

The text *Environmental and Natural Resource Economics: A Contemporary Approach*, on which the chapter modules are based, is available from Houghton Mifflin. See a description of the text at <http://ase.tufts.edu/gdae>.

Please contact Lia Morris (lia.morris@tufts.edu) if you have any problems with downloading modules. I hope these teaching materials are of use, and as always I am happy to hear any feedback regarding course use. (Jonathan M. Harris, Tufts University)

Annotated References

Books

Pruning the tree of life. Ecologists are the richest among us. It is their job to go outside and see what is going on. In the tradition of good science, they sample what is going on in lots of places around the world. Often the food isn't the best nor are the sleeping conditions ideal, but the travelers are home among the wealth that nourishes and calms our disturbed beings. On the darker side, what they have seen is an unsettling vista they would rather forget — many do, but a few don't. Stuart Pimm, in *The World According to Pimm: A Scientist Audits the Earth* (2001, McGraw-Hill), takes us on many of his sampling trips to assess the tree of life on the land and in the water. His tales are the narratives of pruning life while the analytical commentary is the ledger of our accomplishments. He puts flesh on what Stanford biologists concluded almost two decades ago (*BioScience* 36:368-373 [1986]); we are using a huge fraction of life's energy budget — the data are not precise and the assumptions are many, but 30% to 50% is a reasonable range. Pimm's accounts of the field science underlying the numbers provide venues for connecting people to the stark reality of how we have inhabited Earth. (Carl McDaniel, mcdanc@rpi.edu)

How full is the glass? If I were to venture a guess, I would propose that optimists are born, not made. Edward O. Wilson begins *The Future of Life* (2002, Knopf) with a letter to Henry Thoreau in which he assesses our situation as "desperate—but there are encouraging signs that the race can be won." About half way through, however, he hands out humanity's report card: "The somber archaeology of vanished species has taught us the following lessons:

- The noble savage never existed.
- Eden occupied was a slaughterhouse.
- Paradise found is paradise lost.

Humanity has so far played the role of planetary killer, concerned only with his own short-term survival. We have cut much of the heart out of biodiversity. The conservation ethic, whether expressed as taboo, totemism, or science, has generally come too late and too little to save the most vulnerable of life forms." At the end of the book he concludes, "I believe we will choose wisely. A civilization able to envision God and to embark on the colonization of space will surely find the way to save the integrity of this planet and the magnificent life it harbors." Wilson puts an upward spiral on downward trends as I think we must, because to do otherwise is not satisfying, no fun, and non adaptive. *The Future of Life* lays out life's status and provides venues that might bring it through the bottleneck we have unknowingly created. (Carl McDaniel, mcdanc@rpi.edu)

Articles

Robert Ayres (2001) **How Economists Have Misjudged Global Warming**. *World Watch* 14(5):12-25. The most convincing and complete critique to date of how neoclassical economists such as William Nordhaus incorrectly model global climate change costs and benefits. Ayres focuses on three fallacies: the myth of optimal growth in historical economic activity, taking technical progress for granted, and the fallacy of a static model. Ayres describes how such neoclassical modelers typically assume that economic growth occurs steadily, smoothly and automatically, and that government intervention in the economy can only stifle productivity and progress, while providing ample historical evidence to demonstrate the contrary. (Barry Solomon, Michigan Tech, bdsolomo@mtu.edu)

Meetings

The Demise of Democracy and the Rise of Corporate Power

This conference is part of the Democracy Revitalization Project, a ten-year conference series aimed at identifying and reversing the major forces eroding democracy. This project is a collaborative effort between the Center for Ethics and Public Policy at the University of MN, Duluth and the Institute for a Sustainable Future. This conference will be held at the Duluth Entertainment and Convention Center, July 28-30, 2002, Duluth, Minnesota. Topics related to money and politics, media and public opinion, globalization, corporate governance, consumerism and corporate welfare will be considered in workshops and by speakers including Paul Wellstone (tentative), John Stauber, David Korten, Marjorie Kelly, John De Graaf, Paul Templet, John Nichols, and Monika Bauerlein. Please see www.isfusa.org for more information or contact Sue Mageau at (218) 525-4781 or smageau@isfusa.org.

Rocky Mountain Summit

The General Assembly of the United Nations has proclaimed 2002 as the International Year of Mountains. To celebrate this event, **Rocky Mountain Summit: Sustaining Ecosystems and Their People** will bring together community leaders, resource managers, policy makers, scientists, educators and the general public for the purpose of increasing awareness and understanding of the social, cultural, economic, and ecological significance of mountain ecosystems. Major themes of the summit include: human dimensions of mountain ecosystems, sustainable mountain development, mountain ecosystems and resources, and mountain protected areas. The summit will be September 22-26, 2002 at Grouse Mountain Lodge in Whitefish, Montana, and will include a field trip to Glacier National Park. For more details on the conference and information on submission of abstracts, please visit our website: <http://www.cares.missouri.edu/rms2002/>, or contact Julia Rodriguez (Voice: 573-882-7458, Email: Rodriguez@missouri.edu). (Anthony Prato, University of Missouri, PratoA@missouri.edu)