AERE Newsletter

Association of Environmental and Resource Economists *Volume 22, No. 2* *November 2002*

FROM THE PRESIDENT…

Seems like only yesterday that I wrote my first of these letters and now this is the last! Tony Fisher of the University of California, Berkeley takes over the Presidency of AERE on January 1st. I will try in this letter to review the highlights of the past six months (since the last newsletter) but also to share some of the initiatives that the AERE Board has undertaken to strengthen the organization.

- **World Congress.** Nearly everyone knows that the World Congress of Environmental and Resource Economists was held in Monterey, California this past June and was a *great* success. Jointly sponsored by AERE and EAERE, it was hosted by AERE and the University of California. Approximately 1000 people registered for the Congress, many of whom were from outside North America and Europe. I extend our appreciation to those who contributed their personal time and energy to making the Congress such a success, particularly Michael Hanemann and Richard Carson.

- **AERE Web Page.** You may have noticed a new look for the AERE web page (www.aere.org). John Whitehead has been in charge of the web page for five years and has done a great job. Our sincere thanks to John. He has now been joined by Gernot Wagner of Stanford University. Gernot is responsible for the very slick look to our new web page. We are very appreciative of his work on this and his continuing work in maintaining the web page.

- **Standing Committees.** Much of the work of AERE takes place in the four standing committees we have: Program, Workshop, Enduring Publication, Nomination. The Program Committee does yeoman work in putting together the program for the AERE Winter North American Meetings at the Allied Social Science Associations (ASSA) meeting in January and the AERE Summer North American Meetings at the American Agricultural Economics Association (AAEA) meetings in July/August. Larry Goulder finished a term as chair of this committee as of the January 2002 meetings, George Parsons is currently the chair and Carlo Carraro will be heading the committee next year. The Workshop Committee rested last year because of the World Congress

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but has resumed its duties in organizing the workshop for this coming June in Wisconsin. See the Call for Papers on page 8 of this newsletter. Rich Ready leads this effort, replacing Laura Taylor. Our thanks to both of them. The Nomination Committee, led by the Vice-President (currently Cathy Kling), is responsible for the fine slate of candidates in the Fall elections. The Publication of Enduring Quality Committee, led by Tim Haab last year and now led by Gardner Brown, has an important role to play identifying and honoring publications that have made a lasting mark on our profession. Thanks to all of these people and to the unnamed members of the committees.

- ***Ad Hoc* Committees**. This past year we have undertaken a number of new initiatives that may or may not lead to changes in how AERE is run. These initiatives have been developed in depth by three *ad hoc* committees of the AERE Board. The *Ad Hoc* Management Committee (chaired by Carol Jones) has been looking at the question of using a professional management organization to handle many of the administrative functions of AERE, such as membership renewal. Many professional societies use such professional managers; the idea would be to assist the AERE Board and Officers and supplement the work of the Executive Secretary. A call for proposals has been issued. The *Ad Hoc* Revenue Committee (chaired by Laura Taylor) has been looking at the question of AERE dues and other sources of revenue. The *Ad Hoc* Fellows Committee (led by Cathy Kling) is looking into whether it would be desirable to establish an AERE Fellows program, similar to the Fellows programs in the Econometric Society and the American Agricultural Economics Association. I hope to have news on all of these fronts at the AERE luncheon in January. I extend my sincere thanks to all of the chairs of these committees as well as the members.

- **Our Publications.** AERE currently has two publications: the *Journal of Environmental Economics and Management* (*JEEM*) and the *AERE Newsletter*. The newsletter continues to be more than just news, serving a very important function (our thanks to co-editors Marilyn Voigt and John Loomis). The official AERE journal, *JEEM*, continues its role as the flagship journal of our profession. It is in fact one of the most successful field journals in economics, surpassing some general interest journals in criteria such as citations and impact. Our thanks to Joe Herriges, the current editor, and his co-editors for their fine work. As you know, *JEEM* is included in AERE memberships at no extra cost. Despite the success of *JEEM* it is important to realize that the journal publishing business is changing, in large part due to the advent of electronic publishing. The importance of having an individual subscription to a journal (a selling point for membership in AERE) is diminishing with the wide penetration of institutional electronic subscriptions. This concerns me. Although I see *JEEM* as continuing to be a very successful journal and important part of AERE, my recommendation would be that AERE think carefully over the coming years about starting up another journal, a journal that is owned by AERE (*JEEM* is owned by Elsevier). This need not be a substitute for *JEEM*, just a complement. Other organizations have more than one journal (for example, the American Economic Association).

- **Internationalization of AERE.** It is important to remember that the "A" in AERE does not stand for "American." We in fact have members from all over the world. The World Congress reinforced the fact that *ours is a very international profession*. However, the fact remains that the majority of members reside in North America, nearly all officers and members of the Board of Directors have resided in North America during their appointment term and our Winter and Summer meetings are held in North America. In my view, it is important to reinforce the reality that AERE is an international organization. Some steps that can be taken include nominating officers and board members from outside the U.S. and Canada, appointing committee members from outside North America, and reaching out to the developing world where environmental economists often feel isolated. Some few steps have been taken in this direction but more remains to be done. For example, our arrangement for *JEEM* is that the price to members is the same, worldwide: members in Australia pay no more to receive *JEEM* than members in Washington, DC. We are also examining the question of reduced dues for residents of developing countries. Although I think it is important that we continue to hold our Winter and Summer North American meetings, I would hope that we would also hold meetings and workshops overseas at some point in the future.

- **AERE International Affiliates.** As many of you know, AERE has been affiliated with the European Association of Environmental and Resource Economists (EAERE) for some time. AERE members have an opportunity to join EAERE at a reduced price, and EAERE members have a similar opportunity with respect to joining AERE. We are close to setting up a similar arrangement with ALEAR, the Latin American and Caribbean Association of Environmental and Resource Economists (www.alear.org). We have also had discussions with several loosely affiliated groups of environmental economists in Asia and the Middle East.

Reaching out to our colleagues elsewhere benefits our association but even more, it helps strengthen the profession of environmental and resource economists, internationally and particularly in developing countries.

- **Upcoming Meetings.** Mark your calendars for the upcoming *Winter North American AERE Meeting* in Washington, DC, January 3-5, 2003 and the *Summer North American AERE Meeting* in Montreal, July 27-30. The *12th Annual Conference of the EAERE* will be held in Bilbao, Spain on June 28-30. Also, the *First Latin American and Caribbean Congress of Environmental and Resource Economists* will be held in Cartagena de Indias, Colombia, July 9 – 11, 2003. I would encourage members to submit a paper and take the short trip down to Colombia. More information on all of these events may be found elsewhere in this newsletter.

- AERE is such a successful organization because of the very significant contributions of volunteer labor by many. Marilyn Voigt also deserves our thanks for making sure the association functions smoothly. AERE remains the leading professional organization of environmental and resource economists and I am very optimistic about its future.

Prof. Charles D. Kolstad
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AERE ANNOUNCEMENTS

AERE BOARD OF DIRECTORS' MEETING

The annual meeting of the AERE Board of Directors will be held on Friday, January 3rd, from 5:30 to 8:00 p.m. at the Marriott Metro Hotel in the Tokyo Room. Anyone with matters to be brought before the Board should contact the president:

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AERE ANNUAL MEETING AND LUNCHEON

This year's annual meeting and luncheon will be held at the Grand Hyatt Washington Hotel in Constitution E conveniently located near the Convention Center in Washington, D.C. Luncheon reservation forms were mailed to all current members of AERE in early November. A form is also posted on the AERE Web Page. Please return the form to the AERE Business Office by Friday, December 20th, to insure your place. We are unable to guarantee seating for walk-ins.

AERE WORKSHOP 2003

Spatial Theory, Modeling, and Econometrics in Environmental and Resource Economics

The Edgewater Hotel
Madison, Wisconsin
June 15-17, 2003

Please see the Call for Papers on page 8 of this newsletter.

Workshop Committee:

Richard Ready (Chair), The Pennsylvania State University
Gardner Brown, University of Washington
Don Fullerton, The University of Texas at Austin
Laura Taylor, Georgia State University

VISIT THE NEW AERE WEB PAGE!

The AERE web page has been redesigned and has an improved, professional look. At the same time, all of the old features and links are still available and the web address is still www.aere.org. Please refer to this site for the latest information on calls for papers, meetings, etc. A recent addition to the AERE web page is an archive of AERE newsletters (1998-present). Only highlights of the most recent issue will be posted, however, since only current AERE members receive copies of the latest issue (now sent electronically).

Thanks go to the new AERE webmaster: **Gernot Wagner**. Please direct all of your job and meeting listings, links, personal web pages, etc. to Gernot at **gwagner@stanford.edu.** And while you're at it, give him an electronic pat on the back! Sincere thanks is extended to **John Whitehead** who has been AERE's volunteer webmaster for the past five years (while also serving on the AERE Board of Directors for the past two years).

JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT (JEEM)

Beginning January 1st, 2003, all AERE members will be provided with a gratis three-month access period on *ScienceDirect*. Members can view full text content of *JEEM* via www.sciencedirect.com. Users can search for specific articles or subject matter as well as go directly to the Journal via the 'JOURNAL' button at the top of the *ScienceDirect* homepage. Members who paid for electronic subscriptions will receive instructions for access following this gratis period.

SECOND WORLD CONGRESS OF ENVIRONMENTAL AND RESOURCE ECONOMISTS

On June 24 - 27, 2002 almost 1000 participants from more than sixty countries gathered at the *Second World Congress of Environmental and Resource Economists*, held at the Marriott Hotel in Monterey, California. The Congress was sponsored by the Association of Environmental and Resource Economists (AERE) and the European Association of Environmental and Resource Economists (EAERE), and was hosted by the Giannini Foundation of Agricultural and Resource Economics at the University of California (UC) at Berkeley and Davis, together with the Donald Bren School of Environmental Science and Management at UC Santa Barbara, the Department of Economics at UC San Diego, and the University of California's Institute on Global Conflict and Cooperation. The Hewlett Foundation, the National Oceanic and Atmospheric Administration, and the U.S. Environmental Protection Agency also provided financial support for sessions at the Congress.

Michael Hanemann of UC Berkeley served as Chair of the Organizing Committee for the event. Teresa Brown of the UC Davis Conference and Events Service, oversaw the registration effort. Diana Lazo and Chris Busch of UC Berkeley handled other administrative arrangements for the Congress and oversaw a group of fifteen graduate students from the different UC campuses who served as the Congress staff. Marilyn Voigt handled the administrative arrangements with AERE.

During the four days of the Congress, over 750 papers were presented in 144 parallel sessions and 10 symposia. These were selected from more than 1,300 submitted abstracts and papers, which had been evaluated by a 140 member Program Committee consisting of AERE and EAERE members from 24 countries. Richard Carson of UC San Diego served as Chair of the Program Committee and Max Auffhammer of UC San Diego served as Program Coordinator.

In order to promote participation from non-OECD countries, Thomas Sterner of Göteberg University and Jeff Vincent of UC San Diego co-chaired a committee that raised funds to provide special travel grants to attend the Congress for 50 participants from developing countries and emerging economies. In addition, arrangements were made for participation in the Congress by representatives of regional networks of environmental and resource economists from Latin America and the Caribbean, Africa, South Asia, Southeast Asia, and the Middle East and Central Asia. Financial contributors to the travel grant program were provided by the Asian Development Bank, the Giannini Foundation, the Hewlett Foundation, the Irish Ministry of Foreign Affairs, the Swedish International Development Agency, and the World Bank.

The social events arranged for delegates included an opening reception at the penthouse suite of the Marriott Hotel, featuring a memorable performance of the Blues Band "Dr. Keynes and the Blues Equations" (aka Nick Hanley and friends), and a grand Gala Dinner at the world famous Monterey Aquarium. Childcare and a number of side events including whale watching, trips to local wineries, and dinner excursions to Big Sur were organized by Julia Carson.

AERE President Charles Kolstad welcomed participants to the Congress at the first plenary session on Monday, June 24th. At the third plenary session on Wednesday, June 26th, EAERE President Klaus Conrad awarded EAERE's third annual Eric Kempe Prize for outstanding published research in environmental and resource economics to Katrine Nyborg for her article "Homo Economicus, Homo Politicus: Interpretation and Aggregation of Environmental Values" in the *Journal of Economic Behavior and Organization*".

The keynote speech on Monday was given by Partha Dasgupta, who had just been awarded a knighthood by the Queen of England; his title was "Discounting: Public vs. Private and Constant vs. Hyperbolic". The keynote speeches on the following days were given by Daniel McFadden, on "How to Value Environmental Actions," Martin Weitzman, on "Income and Sustainability," and Kenneth Arrow, on "Paradoxes of Sustainability: Theoretical and Empirical." At the closing plenary session on Thursday, we were delighted to be able to announce that Sir Partha Dasgupta and Karl-Göran Mäler had just been awarded the Volvo Prize for the Environment, only the second pair of economists to receive this prestigious award.

A special set of papers honoring the 50th Anniversary of Resources for the Future (RFF) was organized by V. Kerry Smith. These papers reviewed some seminal contributions of early researchers at RFF on environmental and resource economics, and how these had influenced both the academic literature and government policy over time. The presenters included Nicholas Flores, Steve Polasky, Alistair Munro, Karl Lofgren, Y. Hossein Farzin, John Hartwick, Marta Weinberg, Rudiger Pethig, Al McGartland, Michael Greenstone, Per Olav Johansson, and C. Arden Pope. Jordan Louviere and Ken Train presented tutorials on choice models.

The Congress adopted a new format of presentation by accepting papers for short ten-minute presentations, which did not feature discussants, as well as long twenty-minute paper presentations, which featured discussants. About thirty-five percent of the papers presented during the Congress fell in the latter category. There were two paper sessions in the morning and two in the afternoon on all four days. Most of the time, presentations made use of nine parallel tracks. For some delegates, the large number of concurrent sessions meant some good-natured shuttling among the many conference rooms in the Marriott Hotel and the Monterey Conference Center and some hard choices about what presentations to attend. Overall, papers and symposia covered topics in environmental regulation, environment and development, spatial modeling, experimental approaches, environment and technology, valuation and cost-benefit analyses, international environmental issues, economic theory, environmental politics and law, health issues, and regional and country studies. Each day featured an organized mini-track/workshop (*i.e.,* biodiversity, experimental economics, food safety, and spatial modeling). The scientific program, abstracts of papers and a list of participants are all still available in html and Adobe pdf format, and may be found on the Second World Congress Website at:

http://weber.ucsd.edu/~carsonsvs

For many who attended, the opportunities for making new contacts and renewing old acquaintances were among the most valuable aspects of the Congress. Most sessions attracted large audiences, so those who presented had their work heard by a large number of colleagues from around the world. In addition, there were ample opportunities during breaks and lunches to meet colleagues on the grounds of the conference center and the beautiful memory garden near the ocean.

The great interest and participation in the Second World Congress makes AERE and EAERE hopeful that a third World Congress will be offered in 2006. By agreement, the location for the third Congress should be outside of the United States. We encourage submissions of possible locations to any of the EAERE and AERE officers.

Michael Hanemann (University of California, Berkeley)
Richard T. Carson (University of California, San Diego)
Maximilian Auffhammer (University of California, San Diego)

CALLS FOR PAPERS

AERE NEWSLETTER

The AERE Newsletter is soliciting essays about natural resource and environmental economics issues of general interest to the membership. These essays can be relatively short (6-10 double spaced pages) and address a topic that does not fit into the traditional journal outlet. There is currently no backlog, so your essay would likely be published in the following *AERE Newsletter*. Marilyn Voigt and I need your essay in February for the May issue and August for the November issue. If you wish to float an idea by me, feel free to contact me.

John Loomis
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AERE WORKSHOP 2003

Spatial Theory, Modeling, and Econometrics in Environmental and Resource Economics

The Edgewater Hotel
Madison, Wisconsin
June 15-17, 2003

The topic of this year's workshop is how to explicitly incorporate space into economic analysis of environmental and natural resource issues. Environmental and resource problems are inherently spatial, in the sense that what happens at one place affects what happens at other places in ways that depend on their spatial relationship. With the wide availability of desktop GIS programs, economists can now access and manipulate a wealth of spatial data related to environmental and resource issues. There is a need to advance spatial economic theory, models, and statistical methods to take advantage of this new computing capability.

Three types of papers are sought for the workshop: 1) papers that explicitly incorporate space into economic theory applicable to environmental and resource issues, including but not limited to spatially-explicit game theory and theoretical models of resource use in space; 2) papers that develop and use empirical spatial models of environmental and resource issues; and 3) papers that address spatial statistical issues related to environmental and resource issues. Papers could include more than one of the three features. Specific empirical applications could include issues such as harvest or extraction of a spatially-distributed resource, management of mobile resources such as wildlife and fish, wilderness conservation and spatial design of wilderness reserves, watershed or airshed management, and analysis of land use and land use change.

To present a paper at this workshop, please submit an abstract of no longer than 3 pages, double-spaced. **Abstracts are due December 15, 2002.** Expenses of paper presenters will be covered up to a maximum of $1,000, including airfare, ground transportation, hotel, meals, and incidental workshop-related expenses. All expenses must be documented with original receipts. The registration fee for paper presenters will also be waived. All conference presenters and attendees must be AERE members. Nonmembers may join at the time of registration. Authors will be notified of the status of their submissions by January 31, 2003. Accepted papers are due May 1, 2003 and must not be published before the time of the workshop. Further information, including registration forms and travel and lodging information, will be mailed to AERE members in early 2003, and posted on the AERE website, **www.aere.org**.

AERE gratefully acknowledges the funding provided by the National Oceanic and Atmospheric Administration, U.S. Department of Commerce; The Economic Research Service, U.S. Department of Agriculture; and the Fish and Wildlife Service, U.S. Department of the Interior.

Send abstracts to: Prof. Richard Ready

By U.S. Mail or Overnight Service:
Department of Agricultural Economics and Rural Sociology
112-A Armsby Building
The Pennsylvania State University
University Park, PA 16802

By E-mail: rready@psu.edu--Subject Line: "AERE Abstract". **No submissions by FAX, please.**

AMERICAN AGRICULTURAL ECONOMICS ASSOCIATION (AAEA)

Montreal, Quebec, Canada
July 27-30, 2003

The 2003 Summer meeting of the AAEA will be held in Montreal, Quebec, Canada on July 27-30, 2003. The *Summer North American AERE Meeting* is held as part of the AAEA meeting. Prof. Carlo Carraro from the University of Venice and Fondazione Eni Enrico Mattei is serving as chair of the AERE Program Committee. This year, all submissions are to be sent electronically via e-mail. Only .pdf files will be accepted as electronic format. No submissions will be accepted via facsimile or postal mail.

Authors wishing to have a paper considered for the AERE sessions should send a 2-3 page .pdf file by e-mail to:

Monica Eberle: **monica.eberle@feem.it**
Subject Line: **AAEA Submission**

The file should contain the following information:

(I) Name and institutional affiliation of paper presenter and co-author(s);
(II) Title of paper;
(III) Address and e-mail address of paper presenter;
(IV) Up to six key words;
(V) JEL codes;
(VI) Long abstract of the paper (about 1,000 words).

Papers submitted without all the required information will not be considered. Electronic acknowledgements of submissions will be sent to all submitters. The deadline to submit is **January 10, 2003.**

Proposals for complete sessions are also encouraged. Organizers of proposed sessions should submit abstracts of papers following the above instructions. Papers may be accepted or rejected on an individual basis unless the organizer specifically requests the session be considered only in its entirety.

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ALLIED SOCIAL SCIENCE ASSOCIATIONS (ASSA)

San Diego, California
January 3-5, 2004

The 2004 Winter meeting of the ASSA will be held in San Diego, California on January 3-5, 2004. The *Winter North American AERE Meeting* will be held as part of the ASSA meeting. Prof. Carlo Carraro of the University of Venice and Fondazione Eni Enrico Mattei is serving as chair of the AERE Program Committee. This year, all submissions are to be sent electronically via e-mail. Only .pdf files will be accepted as electronic format. No submissions will be accepted via facsimile or postal mail.

Authors wishing to have a paper considered for the AERE sessions should send a 2-3 page .pdf file by e-mail to:

Monica Eberle: **monica.eberle@feem.it**
Subject Line: **ASSA Submission**

The file should contain the following information:

(I) Name and institutional affiliation of paper presenter and co-author(s);
(II) Title of paper;
(III) Address and e-mail address of paper presenter;
(IV) Up to six key words;
(V) JEL codes;
(VI) Long abstract of the paper (about 1,000 words).

Papers submitted without all the required information will not be considered. Electronic acknowledgements of submissions will be sent to all submitters. The deadline to submit is **May 1, 2003.**

Proposals for complete sessions are also encouraged. Organizers of proposed sessions should submit abstracts of papers following the above instructions. Papers may be accepted or rejected on an individual basis unless the organizer specifically requests the session be considered only in its entirety.

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THE EARTH INSTITUTE AT COLUMBIA UNIVERSITY

The Fellows Program is the premier program in the world for those dedicated to better understanding critical scientific and social issues to meet global sustainable development goals. Fellows will be guided by a multidisciplinary team of outstanding, committed, senior scientists from a diverse group of Earth Institute research units and departments across Columbia University.

The Earth Institute is the world's academic pioneer in mobilizing the sciences and public policy in pursuit of a sustainable future, especially for the world's poor. More than 800 scientists are applying their expertise to reduce hunger, disease and environmental degradation, particularly in nations ravaged by the AIDS pandemic, climate change, and extreme poverty.

The Fellows Program has significantly expanded. Designed to provide young innovative scholars with the opportunity to build a foundation in one of the core disciplines represented within the Earth Institute (i.e., any of the social sciences, earth sciences, biological sciences, engineering sciences and health sciences), the program offers a unique intellectual surrounding that fosters cross-disciplinary interaction, research and education.

Senior scientists interested in redirecting their career paths may also apply to the Program. Specifically, candidates are sought who have demonstrated intellectual excellence and commitment and who desire a research career, within or across disciplines, that addresses sustainable development. Earth Institute fellowships will ordinarily be granted for a period of 24 months.

Candidates should submit a proposal for research based in one of the core disciplines mentioned above. The proposal should indicate how the research will contribute to the goal of global sustainable development. Applicants should also indicate the general direction of the disciplinary, multidisciplinary, or interdisciplinary training and research that they would like to pursue at the Earth Institute. This may represent the candidate's novel ideas, or an indication of interest in existing Earth Institute projects. Successful applicants will have opportunity to engage in a modest amount of teaching, if they so desire.

Proposals will be evaluated by the Earth Institute Academic Committee on the basis of the strength of the research proposal and relevance to the Earth Institute's goals.

Postdoctoral Fellows Selection Committee
The Earth Institute at Columbia University
35 West 116th Street (Mail Code 4335)
Columbia University
New York, NY 10027
Telephone: 212 854-3893
Fax: 212 854-1993

Applications submitted **by January 17, 2003** will be considered for fellowships starting in the summer or fall of 2003, and fellowship offers will be made early in March 2003.

Columbia University is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply. More information can be found at:
http://www.earth.columbia.edu/postdoc/

EUROPEAN ASSOCIATION OF ENVIRONMENTAL AND RESOURCE ECONOMISTS (EAERE)

12th Annual Conference of the EAERE

Euskalduna Conference Center
Bilbao, Spain
June 28th – 30th, 2003

The 12th annual EAERE Conference will be held in Bilbao, on the northern coast of Spain. Bilbao is located in the beautiful Basque country at the western end of the Pyrenees on the Bay of Biscay.

The conference program will consist of:

- Three Keynote Speaker Sessions

  Erwin Bulte (University of Tilburg)
  Carlo Carraro, University of Venice and
  Fondazione Eni Enrico Mattei (FEEM)
  Kathleen Segerson, University of Connecticut

- Several Panel Sessions (topics and participants to be confirmed)

- Over 50 contributed paper sessions and about 200 contributed papers.

The conference social events will include a cocktail reception and dinner at the Guggenheim Bilbao Museum and the main conference dinner to be held at a typical basque house "Finca Bauskain".

Papers should be submitted on-line through the Congress web site no later than **January 31, 2003.** Complete information on the submission process and further details of the conference, including a registration form, are available through the Congress web site at:

www.eaere.org

LATIN AMERICAN AND CARIBBEAN ASSOCIATION OF ENVIRONMENTAL AND RESOURCE ECONOMISTS (ALEAR)

First Latin American and Caribbean Congress on Environmental and Resource Economics

Cartagena de Indias, Colombia
July 9 - 11 2003

ALEAR (Asociación Latinoamericana y del Caribe de Economistas Ambientales y de Recursos Naturales) is a Non-Governmental Organization (NGO) that assembles institutions and professionals interested in the research, the application and promotion of environmental and natural resource economics. Several important Latin American institutions in the public, private and educational sectors sponsor ALEAR's initiative.

This biannual Congress will present the most relevant regional work and developments in the field. It will include the presence of both regional and international experts, as well as speakers renowned worldwide for their contribution to the field. Translators for both Spanish and English presentations will be present at all sessions.

Papers on research and applied environmental and resource economics, with emphasis on issues related to Latin American environmental problems are encouraged. Each paper will be classified in the Congress sessions based on specific topics. The deadline to submit papers is **March 1, 2003.** Authors must be registered in the Congress to have their papers included in the program. For more information, including guidelines for submitting papers and registration, see ALEAR's web site at:

www.alear.org

Registration will begin on January 15th, 2003 and the payment deadline will be May 31st, 2003. There are reduced fees for registration before March 31st. Cartagena de Indias is a beautiful colonial city on the Caribbean Sea about two hours from Miami, Florida.

COLLEGE OF MENOMINEE NATION

Sharing Indigenous Wisdom: An International Dialogue on Sustainable Development

June 8-12, 2003
Radisson Hotel & Conference Center
Green Bay, Wisconsin

Indigenous peoples all over the world are steadily confronted with outside pressures of having both their land and cultures assimilated into the dominant cultural context. There is currently an acute need to explore successful models of sustainable development that allow for the preservation of indigenous lands, sovereignty and culture, while also allowing for the integration of economic development, institutional capacity-building and technological advancement.

The Menominee believe their model of sustainable development provides clues to the kind of values, economic system, and social order that might be necessary in a sustainable world. As the state of the world's environment becomes more critical, it is believed that this model as well as other principles derived from indigenous wisdom might offer clues from which the modern world can learn as it desperately seeks development alternatives.

Who Should Attend?

Scholars, policy makers, practitioners and concerned individuals from around the world, whether working in academia, the private sector, government or civil society organizations and other advocates of sustainable development. All will find topics of interest at this conference.

Major Topic Themes

The Menominee model of sustainable development is based upon the interactive dynamics between humans and the natural environment. This interactive process contains six inter-related dimensions: the natural environment; land and sovereignty; economics; technology; institutions; and human perception, activity, and behavior. This theoretical model conceptualizes sustainable development as being the process of maintaining balance and reconciling the tensions between these dimensions. This model presupposes that change within one dimension will impact other dimensions in an ever-unfolding diffusion of responses to change. The major topic theme of this conference is to share research and well-grounded examples that reflect the interface of any two or more dimensions of this model of sustainability.

Papers/Posters/Proposals

If you wish to present a paper, give a poster presentation, or organize a workshop session, send your proposal, abstract or description, (not more than 500 words single spaced) postmarked no later than **January 31, 2003** to: **Delia Kundin, Institutional Advancement Specialist, College of Menominee Nation, P.O. Box 1179, Keshena, WI. 54135**. Or attach to e-mail in MS Word, Adobe Acrobat (.pdf) or plain text format to: **dkundin@menominee.edu** Acceptance letters will be mailed no later than **March 3, 2003.** More information is available at:

www.sharingindigenouswisdom.org

NORTHEASTERN AGRICULTURAL AND RESOURCE ECONOMICS ASSOCIATION (NAREA)

Linkages Between Agricultural and Conservation Policies Workshop

Portsmouth, New Hampshire
June 10-11, 2003

The 2003 *Linkages between Agricultural and Conservation Policies Workshop* will be held in Portsmouth, New Hampshire, on June 10-11, 2003 immediately following the annual meeting of the NAREA.

The objective of the workshop is to stimulate research and discussion to improve our understanding of the complex incentives, markets, international issues, policies, and physical and/or social forces shaping farmers' joint production and conservation decisions. Such issues are of increasing policy relevance, as seen in debate over the 1996 and 2002 Farm Bills and the World Trade Organization. Topics of interest would include the interaction of commodity and conservation programs on farmer's decisions; the efficiencies and inefficiencies arising from programs' interactions, how farmers choose among voluntary conservation programs; the effects of regulations and other policies on these choices; and innovative approaches for achieving society's many objectives related to farm income and conservation. Applications could involve land use, water quality, integrated pest management, best management practices, watershed management, rural amenities, wildlife habitat, forest production and conservation, or any other aspects integrating agriculture and conservation concerns. Papers focused exclusively on one agricultural or conservation program will not be given high priority. Workshop proceedings will be published in a special issue of the *Agricultural and Resource Economics Review (ARER)* if accepted after the journal's normal review process. An honorarium of $1,000 will be provided on submission of the paper to *ARER* by June 30, 2003.

To submit a paper for consideration by the workshop's selected paper committee, please e-mail a five-page abstract (MS Word or PDF attachment) with a title but no other identifiable information to Dr. Titus O. Awokuse at the address below. The five-page limit relates to text only and excludes tables, figures, and literature cited. The deadline for abstracts is **December 16, 2002.** Authors will be notified of the status of their abstract submissions by February 14, 2003. Full papers must be received from notified authors by May 1, 2003 to be considered for inclusion in the program. *AREA* must receive papers by June 30, 2003 to be considered for expedited review. Further information concerning the workshop will be provided in upcoming issues of the *NAREA Newsletter*, the AAEA Exchange, and on the AERE Web Page. Send abstracts to Dr. Titus O. Awokuse at: **kuse@udel.edu**

UNITED STATES SOCIETY FOR ECOLOGICAL ECONOMICS (USSEE)

Second Biennial Conference

Sheraton Hotel & Conference Center
Saratoga Springs, New York
May 22 - 24, 2003

The *Second Biennial Conference* of the USSEE will be held in Saratoga Springs, New York 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 six 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.

Confirmed keynote speakers include Juliet Schor, best-selling author of *The Overworked American*, and *The Overspent American*, and James Howard Kunstler, regular contributor to the *New York Times Magazine* and author of *The Geography of Nowhere*, *Home from Nowhere*, and *The City in Mind*. Plenary sessions taking shape include Bob Costanza, Stephen Schneider, and other invited scholars and practioners active in ecological economics and related areas.

Inquiries or abstracts for presentations should be directed by e-mail to: **Jon Erickson of the University of Vermont at jdericks@zoo.uvm.edu**. Abstracts are due **by December 15, 2002**, and will be selected for conference presentation 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

If e-mail is not available, please direct abstracts by fax to: 802-656-8683, or post to: Jon Erickson, School of Natural Resources, 344 Aiken Center, University of Vermont, Burlington, VT, 05405, USA.

General conference information and periodic updates can be found at the USSEE's web page at: **www.ussee.org**

UNIVERSITY OF VICTORIA, CENTRE FOR ASIA-PACIFIC INITIATIVES (CAPI)

West China Development: Domestic Strategies and Global Implications

University of Victoria
Victoria, British Columbia, Canada
Commons Conference Centre
March 6th - 8th, 2003

This international conference is hosted by the University of Victoria, Centre for Asia-Pacific Initiatives (CAPI). CAPI was established in 1987 as an important element of the University of Victoria's plan to expand and strengthen its links with universities and other institutions in the Asia-Pacific region, especially with China, Japan, Southeast Asia, Korea and the developing island states of the Southwest Pacific.

Synopsis: China's economic takeoff and rapid growth in the last two decades have been mainly a coastal phenomenon. A series of fiscal initiatives and institutional innovations have been proposed and implemented to boost the region's development prospects and close the income gaps between the eastern coast and the inland provinces. To Chinese policymakers, the development of the west region is mean to reduce interregional disparities and to meet both environmental protection and national security goals.

The successful development of West China must overcome significant econ-geographic obstacles in this huge, land-locked region. For two decades, this resource-rich territory has been lagging behind China's coastal regions in market-oriented reforms and openness to trade and investment. The lack of human capital in its vast rural spaces further dims the region's prospects for both early and long-term growth. Its deteriorating ecological system highlights the urgency for an environment-friendly development program. Finally, the protection of West China's ethnic diversity and cultural differences within its population undoubtedly must be taken into account by national policymakers.

These challenges will severely test the wisdom of scholars, policymakers and investors. It may be that the early development experience of mature economies, like Canada and the U.S., faced with vast territories and significant regional differences, may provide comparative insights to West China development strategists.

There is little doubt that West China's development will have a significant impact on the rest of the world.

Already annual sandstorms originating in West China are increasingly impacting neighboring and more distant states. Any successful West China development program must deal with the improvement of the area's ecological prospects, an objective given short shrift in previous development plans.

China is undergoing a transition from an export-led growth model towards a domestic-demand driven one, which is more compatible to a huge continental economy. The development of West China will facilitate this ongoing transition. The consequential impact upon the emerging ASEAN+X Free Trade Area and other forms of international economic cooperation in Pacific Asia will bear watching and critical measurement. It is of policy significance as well to business interests to evaluate the trade and investment opportunities that may arise from West China economic development.

Some predict that a successful West China development program will do much to lift millions of people out of poverty. Many of these people belong to China's ethnic minorities who share similar cultures and religions with their counterparts in middle Asian nations. This process, including respect for ethnic minorities and human security, will have far-reaching geopolitical impact on this part of the world.

The deadline for submission of paper abstracts has been extended to **November 30, 2002**. Please see the CAPI Web Page at: **www.capi.uvic.ca** for more information about the conference.

WATER RESOURCES RESEARCH (WRR)

Water Resources Research (WRR) is an interdisciplinary journal published by the American Geophysical Union. *WRR* is introducing a new feature: special sections in water economics and politics. One of the special sections on water economics and politics will focus on International River Basin Conflict and Cooperation.

Realizing that much was published on that topic, *WRR* is seeking papers that will focus on methodologies and their application rather than case studies of particular river basins. Papers are sought that will integrate economic and political analyses in pointing out a possible generalization, or a methodology for analyzing a situation and prospects of improving conflict relationships among riparians to an international river basin.

Please send either a complete paper or a paper proposal (with time schedule for its completion) for preliminary consideration to Ariel Dinar at:

adinar@worldbank.org by January 31, 2003.

Authors are invited to discuss preliminary ideas via e-mail.

MEETINGS

ALLIED SOCIAL SCIENCE ASSOCIATIONS (ASSA)

January 3rd – 5th, 2003
Washington, DC

AERE PAPERS SESSIONS

Non-Market Valuation

Chair: Alan Randall, Ohio State University
Date/Time: Friday, January 3rd, 8:00 a.m.

Papers:

Kevin J. Boyle (University of Maine), Mark M. Morrison (Charles Sturt University, Australia), and Laura O. Taylor (Georgia State University), "Provision Rules and the Incentive Compatibility of Conjoint Surveys"
Discussant: Trudy Cameron, University of Oregon

Roger H. von Haefen (Bureau of Labor Statistics), "Consideration Sets and Continuous Demand System Models"
Discussant: Klaus Moeltner, University of Nevada

V. Kerry Smith (North Carolina State University), Subhrendu K. Pattanayak, and George Van Houtven (Research Triangle Institute), "Preference Calibration for Valuing Reductions in Mortality Risks"
Discussant: Alan Randall, Ohio State University

Vic Adamowicz, Peter Boxall, Michael Haener, Yaoqi Zhang, Donna Dosman, and Juanita Marois (University of Alberta), "Assessing the Impacts of Forest Management on Aboriginal Hunters in Canada: Evidence from Stated and Revealed Preference Data"
Discussant: Chris Leggett, Industrial Economics Incorporated

Global Environmental Issues

(AEA/AERE Invited)

Chair: Anthony Fisher, University of California, Berkeley
Date/Time: Friday, January 3rd, 10:15 a.m.

Papers:

Geoffrey Heal (Columbia University), "Optimality of Sustainability"
Discussant: Hossein Farzin, University of California, Davis

Urvashi Narain (Resources for the Future) and Klaas van't Veld (University of Michigan), "Achieving 'Meaningful Participation' by Developing Countries: Implications for Long-run Climate Change Policies"
Discussant: Scott Barrett, The Johns Hopkins University

David Zilberman (University of California, Berkeley), "Biodiversity, Biotechnology and Intellectual Property Rights"
Discussant: Jenny Lanjouw, The Brookings Institute

Invited Session to Honor the Memory of Sherwin Rosen

Chair: Glenn C. Blomquist, Univ. of Kentucky
Date/Time: Friday, January 3rd, 2:30 p.m.

Papers:

George S. Tolley (University of Chicago), "Sherwin Rosen as a Scholar and Colleague"

Matthew E. Kahn (Tufts University), "Sherwin Rosen as a Teacher and a Mentor"

Orley Ashenfelter (Princeton University) and Michael Greenstone (University of Chicago), "Using Mandated Speed Limits to Measure the Value of Statistical Life"
Discussant: Philip E. Graves, Univ. of Colorado

W. Kip Viscusi (Harvard University), "The Value of Life: The Current State of the Market Evidence"
Discussant: Jason R. Shogren, Univ. of Wyoming

Mark C. Berger, Glenn C. Blomquist (University of Kentucky), and Klara Z. Sabirianova (University of Michigan), "Compensating Differentials in Emerging Labor and Housing Markets: Estimates of Quality of Life in Russian Cities"
Discussant: Timothy J. Bartik, W. E. Upjohn Institute for Employment Research

Topics in Environmental Economics

Chair: Tom Tietenberg, Colby College
Date/Time: Saturday, January 4th, 8:00 a.m.

Papers:

Juan-Pablo Montero (Massachusetts Institute of Technology), "Testing the Efficiency of a Tradeable Permits Market"
Discussant: Tom Tietenberg, Colby College

Greg Hunter (Tilburg University-The Netherlands), "A Contingent Claims Approach to Assessing the Impact of Regulation of Firm Value: A Refinement of the 'Porter' Hypothesis"
Discussant: John Horowitz, The University of Maryland, College Park

Robert Deacon (University of California, Santa Barbara), "Dictatorship, Democracy, and the Demand for Environmental Quality and Other Public Goods"
Discussant: Ken Koford, University of Delaware

Matthew Doyle and Quinn Weninger (Iowa State University), "Rights-based Fisheries Management Under Random Stock Growth and Costly Investment Reversibility of Fishing Capital"
Discussant: Lee Anderson, University of Delaware

The Mortality Benefits of Environmental Policies: What Influences the Value of a Statistical Life?

Chair: Nathalie B. Simon, U. S. Environmental Protection Agency (EPA)
Date/Time: Saturday, January 4th, 10:15 a.m.

Papers:

Dan Black and Thomas J. Kniesner (Syracuse University), "On the Measurement of the Price of Risk"
Discussant: W. Kip Viscusi, Harvard University

James K. Hammitt (Harvard University) and María Eugenia Ibarrarán (Universidad de las Américas, Puebla), "Estimating the Economic Value of Reducing Health Risks in Mexico City"
Discussant: V. Kerry Smith, North Carolina State University

Anna Alberini (The University of Maryland, College Park), "Examining the Econometric Robustness of Estimates of VSL from Contingent Valuation Surveys"
Discussant: Trudy Cameron, University of Oregon

J. R. DeShazo (University of California, Los Angeles) and Trudy A. Cameron (University of Oregon), "Fates Worst than Death? Understanding Individual Preferences for Reductions in Morbidity-Mortality Events"
Discussant: Maureen Cropper, The World Bank and The University of Maryland, College Park

Health and the Environment: What Can We Learn Using GIS Analysis?

Chair: Nathalie B. Simon, U. S. Environmental Protection Agency (EPA)
Date/Time: Saturday, January 4th, 2:30 p.m.

Papers:

Marie Lynn Miranda (Duke University), "Using GIS Models to Design Preventive Intervention Programs in Children's Environmental Health"
Discussant: Matthew Neidell, University of Chicago

Daniel Osgood, Daniel Bronson, and Mary Kay O'Rourke (University of Arizona), "Trade-offs in Agriculture and Children's Health: A GIS-based Damage Function for Pesticide Application and Exposure"
Discussant: Lori Lynch, The University of Maryland, College Park

Charles Griffiths, Nathalie B. Simon and Tracey Woodruff, (EPA) "A Cross-Sectional Analyses of Asthma and Air Pollution with Correction for Spatial Autocorrelation"
Discussant: Jacqueline Geoghegan, Clark University

Luc Anselin (University of Illinois at Urbana-Champaign), James C. Murdoch (University of Texas at Dallas), and Mark A. Thayer (San Diego State University), "The Sensitivity of Concentration-Response Function to the Explicit Modeling of Space-Time Dependence."

Discussant: Kathleen Bell, University of Maine

The Importance of Spatial Modeling to the Design of Environmental Policies

Chair: V. Kerry Smith, North Carolina State University
Date/Time: Sunday, January 5th, 8:30 a.m.

Papers:

Randall Wash (University of Colorado), "Analyzing Open Space Policies in Location Equilibrium Models"

Discussant: Dennis Epple, Carnegie Mellon University

James E. Wilen (University of California, Davis), and James N. Sanchirico (Resources for the Future), "Introducing Space into Renewable Resource Models"

Discussant: Ted McConnell, University of Maryland, College Park

Kelly Beddard, Antonio Bento, and Shelly Norman (University of California, Santa Barbara), "Are Urban Growth Boundaries 'Smart' Policies or Does New Development Simple Spillover into Neighboring Communities and Agricultural Areas?"

Discussant: Jan Brueckner, University of Illinois at Urbana-Champaign

Research Using Data from the Pollution Abatement Cost and Expenditure Survey

Chair: Robert Stavins, Harvard University
Date/Time: Sunday, January 5th, 10:45 a.m.

Papers:

Randy Becker (U. S. Bureau of the Census), "Pollution Abatement Expenditure by U.S. Manufacturing Plants: Do Community Characteristics Matter?"

Discussant: Kelly Maguire, U. S. EPA, National Center for Environmental Economics

Linda Bui (Boston University), "Plant Level Responses to Disclosure Rules: The Effectiveness of TRI Regulation in Petroleum Refineries"

Discussant: Ann Wolverton, U.S. EPA, National Center for Environmental Economics

Wayne Gray (Clark University and NBER) and Ronald Shadbegian (University of Massachusetts at Dartmouth and U. S. EPA, National Center for Environmental Economics), "When Is Enforcement Effective – or Necessary?"

Discussant: Amanda Lee, Office of Management and Budget

Al McGartland (U. S. EPA, National Center for Environmental Economics), "Picking Up the PACE at the Environmental Protection Agency: New Challenges and Opportunities"

Discussant: Lori Snyder, Harvard University

Economics of Designing Terrestrial Carbon Sequestration Programs

Chair: Richard Newell, Resources for the Future
Date/Time: Sunday, January 5th, 1:30 p.m.

Papers:

John Antle , Susan Capalbo, Sian Mooney (Montana State University), and Keith Paustian (Colorado State University), "Economically Optimal Spatial Scale and the Implementation of Soil Carbon Sequestration Contracts in Agriculture"

Discussant: Brian Murray, Research Triangle Institute

Alex Pfaff (Columbia University) and Suzi Kerr (Motu Economic and Public Policy Research Trust), "What Would Have Happened? Reviewing and Improving Forest Baselines"

Discussant: Andrew Plantinga, Oregon State University

Kenneth Richards (Indiana University), "Instrument Choice for a Domestic Forest Carbon Sequestration Program in the United States"

Discussant: Robert Stavins, Harvard University

Roger Sedjo (Resources for the Future), "Carbon Sequestered in the Terrestrial Biosphere: Renting Off-set Credits for Temporary Sequestration"

Discussant: Jinhua Zhao, Iowa State University

ESSAY

Price Setting Under the Federal Recreation Fee Demonstration Program: 1996-2001

Molly Espey[1]

Charging for recreational access to and use of public lands has been a topic of debate since the early 1900s (White 1992). In 1908, Mount Rainier National Park became the first to charge for automobile access, assessing an annual fee of $5 per vehicle. By 1916 when the National Park Service was created, five of the fourteen national parks collected more than enough funds to cover their operating expenses (Leal and Fretwell 1997). Initially, fees collected by the Park Service were put into a special fund that was accessible without Congressional approval. In 1918, however, Congress changed the law and required the Park Service to put revenue collected from user fees into a general fund of the U.S. Treasury, significantly diminishing the incentive for the Park Service to collect fees.

It wasn't until in 1964, that the Forest Service and Bureau of Land Management were explicitly authorized to charge campground and entrance fees, but since the proceeds were to go back to the U.S. Treasury, there was little effort at that time to institute fee collection programs (O'Toole 1995). In 1973, President Nixon actually issued an executive order which prohibited fees from being charged on most forest campgrounds unless flush toilets, showers, sewage disposal, visitor protection, access roads, designated camping spaces, garbage cans, and drinking water were provided (Geores 1996).

Minimal fee collection and increased visitation led to an increasing disparity between the fees collected from recreation on national lands and the costs associated with providing the recreational services. An audit of the National Park Service in 1993 found that only five out of the one hundred and thirty-six units audited made regular fee collection efforts (Leal and Fretwell 1997). In 1995, receipts from national park recreation fees totaled $80.5 million or about 7.5% of the total costs of park operations equating to average revenue of $0.30 per visitor (Leal and Fretwell 1997). This disparity between user fee revenues and expenditures on public lands management was a major impetus for Congress to pass the Recreation Fee Demonstration Program (RFDP) in 1996.

The RFDP expanded the authority of public land management agencies to charge for recreational access and use of public lands and allowed most of the new fees revenue to be retained in the areas where they are collected. This authorization has been extended through the summer of 2002, but the status of the RFDP beyond that is uncertain. This research examines the fee setting decisions of federal land managers after the passage of the RFDP legislation, including the choice to impose fees or not, the utilization of differential pricing reflecting considerations of economic efficiency, and the consideration of social welfare. This paper begins with a brief description of the outcome of the RFPD. This is followed by a brief review of the economic theory of charging fees for recreational use of public lands. Then a model to reflect price setting under the RFPD is presented and existing projects are examined in the context of this model.

Recreation Fee Demonstration Program

With the passage of Public Law 104-134, Congress authorized the National Park Service (NPS), the U.S. Fish and Wildlife Service (FWS), Bureau of Land Management (BLM), and the U.S. Forest Service (USFS) to implement new fees at recreation sites. The expressed purpose of the RFDP is "to demonstrate the feasibility of use-generated cost-recovery for the operation and maintenance of recreation areas or sites and habitat enhancement on federal lands." Significantly, the legislation allows the participating agencies to retain all of the revenues collected under the RFDP, with at least 80% to remain at the site where it is collected.

As of September 30, 2000[2], there were 136 NPS demonstration projects, 88 FWS projects, 102 BLM projects, and 89 USFS projects. Overall, $175.9 million in fee revenue was collected in 2000, essentially the same as the $176.5 million collected in 1999. These figures compare to total recreation fee revenues of just $93.3 million in the year preceding the implementation of the RFDP. Chart 1 shows the change in total recreation fee revenues for each of the agencies between 1994 and 2000.

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[1] Department of Agricultural and Applied Economics, Clemson University, Clemson, SC 29634. Email: mespey@clemson.edu. I am grateful to John Loomis for encouragement and helpful comments and to Josh DeWald for research assistance.

[2] The progress report about the RFDP covering 2001 was not available at the time this was written.

Since most federal land is located in the western part of the country, most RFDP sites are also in the West, including 100 percent of BLM sites and nearly two-thirds of USFS sites, but only 55 percent of NPS sites and 29 percent of FWS sites.

Theory of Pricing for Use of Public Lands

Most research on recreation fees has focused on the appropriateness of fees, the values and attitudes of recreators, the use of new fee revenues, and development of demand models for valuation of recreational sites or attributes. Two papers that focus on the economics of recreational price setting are relevant to the analysis of the price setting behavior of public land managers under the RFDP, Rosenthal, Loomis, and Peterson (RLP, 1984) and Turner (2000). Well before the RFDP, RLP examined the economic theory of efficient pricing for recreational use of public lands. Turner developed a social welfare maximization model including fee setting but focused strictly on National Parks and did not consider the impact of the Recreation Fee Demonstration Program. This section will summarize the theory presented in these two papers then expand upon these models to better reflect the nature of the RFDP.

RLP focused on the issue of under what conditions recreation should be priced and at what level prices should be set to achieve economic efficiency. If recreational use of federal land is truly a public good, marginal cost of an additional user would be zero and pricing for access would not be economically efficient. However, if the marginal cost of an additional user is greater than zero, then charging a price equal to marginal cost would be efficient. They conclude that marginal costs of recreation arise from three sources: congestion, ecological damage, and operating costs of the site, and that efficient pricing would reflect these marginal costs.

RLP also suggest that if the costs of administering a pricing system are high, it might not be worth implementing fees. Finally, RLP discuss recreational situations in which there are capacity limitations, such as camping sites. In these cases, efficient pricing rules dictate that price be set equal to marginal cost if demand is less than the capacity limit and set at the market clearing price if demand exceeds the capacity limit.

Examination of fees implemented under the RFDP indicates that, at least at some sites, federal land managers have implemented prices to some degree according to these pricing rules. For example, higher weekend or summer fees reflect congestion pricing, fees for most camp sites reflect capacity constraints, while lack of fees appears to reflect high costs of exclusion and/or high administration costs.

Turner (2000) takes a more theoretical approach to the analysis of outdoor recreation fees, using the theory of club goods to derive efficiency conditions for management of areas with multiple excludable activities as well as pure public good wilderness. In this model, the planner chooses the number of visits and amount of each activity for each individual, as well as the amount of wilderness. Efficient activity tolls are determined to cover the direct marginal costs of the activity (operating cost), as well as both congestion and ecological externalities. With efficient activity tolls, Turner concludes that the efficient entrance fee is zero, assuming that "activities", not visits, create costs. However, in many national parks today, entrance itself adds both to congestion and to ecological costs (e.g. air pollution), suggesting that it may actually be efficient to charge for entry.

The next section will develop a model for fee setting under the RFDP. This model is an attempt to reflect many of the efficiency considerations brought up by RLP and Turner but to better reflect real world decision making in the face of political uncertainties and a public sometimes hostile to the idea of paying for access to federal lands.

Model

Federal land managers are not omniscient social planners with the ability to decide the number of recreational visits and participation in recreational activities for each individual in society. Nor are they necessarily profit maximizing producers of recreation. Rather, federal land managers are interested in supplementing their budgets via recreation fees but with consideration for the satisfaction of their visitors and recognition that their budgets also can be influenced through Congressional politics, which in turn can be influenced by those same visitors. This study recognizes that site managers make fee setting decisions, not visitation level decisions, and that they are influenced by negative public sentiment about fees, a consideration omitted from the studies previously discussed.

It is hypothesized that federal recreation managers set fees for entrance (P_v) and activities (P_j) and spend money (I) to inform visitors about the use of the fee revenue in a manner that maximizes visitor utility subject to the agency budget constraint as follows:

$$\text{Max} \sum_{i} Ui(V_{i}(v_{i}(P_{v})), A_{ij}(a_{ij}(P_{j})), I, X)$$

$$\textit{subject to } B + \sum_{i} P_{v} v_{i}(P_{v}) + \sum_{j} \sum_{i} P_{j} a_{ij}(P_{j}) = C(\sum_{i} v_{i}(P_{v}), \sum_{j} \sum_{i} a_{ij}(P_{j}), I, F, O)$$

where V_i is a quality adjusted measure of visits (v_i) by person i and A_{ij} is a quality adjusted measure of participation in activity j by person i (a_{ij}), where quality is a function of the number of other visitors and activity participants, and X is all other goods. B is the federal budget allocation to the site, C is cost which is a function of visitation (v_i), activity participation (a_{ij}), provision of information (I), and fixed costs of implementation of a fee system (F), and other costs independent of visitation (O).

Taking the derivative of the Lagrangian for the above maximization problem with respect to entrance fees gives:

$$\sum_{i} (\partial U_{i}/\partial V_{i})(\partial V_{i}/\partial v_{i})(\partial v_{i}/\partial P_{v})$$
$$+ \sum_{k \neq i} (\partial U_{i}/\partial V_{k})(\partial V_{k}/\partial v_{k})(\partial v_{k}/\partial P_{v})$$

$$- l \; [P_{v} \sum_{i} \partial v_{i}/\partial P_{v} + \sum_{i} v_{i} - \sum_{i} (\partial C/\partial v_{i})(\partial v_{i}/\partial P_{v})]$$

The first term is the direct impact on utility from a change in entrance fees resulting from a change in visitation and would be negative. The second term reflects the impact of fees on utility as it affects the quality of visits operating through a change in the level of congestion and ecological damage and would be positive. This suggests that the greater the congestion or ecological externalities, the higher the optimal fee would be. The constraint reflects the monopoly power of the federal agency with marginal revenue a function of both prices and visitation. The more elastic the demand for recreation at a given site, the smaller the marginal revenue for a given increase in fees. Hence, site managers would be expected to be sensitive to demand elasticity in general, as well as across users and time with an incentive to price discriminate to the extent that the gains from charging differential fees outweigh the cost. The last term is the marginal cost of P_v. The first order condition for P_j, activity fees, would be similar.

The first order condition associated with the provision of information about the RFDP is simply 3MU/MI = 8(MC/MI). Agencies spend money on information campaigns in order to increase public acceptance of the RFDP. On the margin, the amount of money spent on information will be equated to the positive impact on utility from such information.

Fees established under the RFDP have ranged from charges for parking to entrance fees to charges for backcountry camping, and have been set per vehicle, per person, and per family with some charges per day, some per week, and others per year. This wide array of fees makes quantitative comparison across RFDP sites virtually impossible. Instead, this study uses the theoretical framework just described to assess why some locations have RFDP fees while others do not, why fees are set such as they are at different sites, and why agencies spend money on information about the RFDP.

Analysis

The above model suggests that the factors that are important in the determination of fees at RFDP sites are the negative impact on utility due to higher cost of visitation, the positive impact on utility resulting from a reduction in congestion and ecological damage associated with larger numbers of visitors, the marginal revenue (which will be a function of elasticity), and the marginal cost per visitor of assessing a fee. Given this, it would be expected that fees would be more likely, and would be higher, when congestion and/or ecological damage are high as suggested by RLP. They would also be expected to be more likely and be higher when the demand is relatively inelastic, when marginal cost of fee collection is relatively low, and when people are generally less averse to fees for use of public lands.

The more outspoken the public is in a given area against fees, the more the agency would be expected to spend on information campaigns. On the other hand, just as RLP suggested it might be efficient not to implement a fee system at all if the administrative costs are too high, it might be efficient not to implement fees if the public sentiment is too negative.

Observation of fees set under the RFDP shows great variation. Throughout most of the south, fees are relatively low and constant across a whole state for USFS sites. There is likely a relatively high degree of substitutability of recreational opportunities across these areas implying relatively high elasticity hence lower fees. There also appears to be fairly low levels of monitoring of visitation reflecting the low marginal revenue per visitor. On the other hand, congestion and ecological protection is expressed as the justification for implementation of fees at many western, southwestern, and Rocky Mountain sites. But given strong negative public sentiment against fees, this tendency for higher fees is often offset, resulting in moderate fees throughout the country.

Previous studies have found generally greater acceptance of fees in the south and the east, where public lands are scarcer and people are more used to paying for outdoor recreational opportunities. Observation indicates that the RFDP sites in the west, Rocky mountain states, and the southwest have larger information programs to counter the stronger negative public sentiment about fees. Further, sites in the western states tend more often to have activity specific fees that have more inelastic demand (fewer substitutes) and lower administration costs. Examples include boat launching, camp sites, guided tours, and visitor information centers.

Certain activities that might have relatively high monitoring costs such as back country cross country skiing and river rafting for which fees are nonetheless imposed, are also activities that people generally expect to pay for (so small negative utility associated with fees) and have high demand with few substitutes. On the other hand, there were few fee demonstration sites in northern mountain states such as Montana, where access is difficult to monitor and there are a relatively large number of substitutes. Finally, it appeared that there were few demonstration projects in the southwestern region but a large number of existing concessionaires operating guided recreation opportunities. Hence the opportunities for the federal managers to charge for services were limited.

Further evidence of the entrepreneurial abilities of federal land managers can be seen in the form of price discrimination, cooperative pricing and marketing. Third degree price discrimination, charging different prices for different groups of users based on different willingness to pay and elasticity of demand, results in such things as senior discounts. Second degree price discrimination, charging different prices for different quantities, results in different per day prices for daily passes, weekly passes, and annual passes at many sites. Peak load pricing results in higher prices during weekends and lower rates for weekdays. Prices may also be higher during the tourist season, typically the summer, and lower during the off-season months. First and second degree price discrimination were most evident at NPS sites, sites that are most unique hence offering the greatest opportunity for price discrimination. Peak load pricing was most evident for USFS and BLM sites in the western states, sites most visited by locals on weekends but rarely catering to weekday vacationers. Seasonal pricing is most common at NPS sites where there are great differences between summer and winter recreational opportunities, for example, where winter access is limited.

Cooperative pricing efforts across RFDP sites have been attempted, both to reduce implementation costs and to increase demand by making it easier for recreators to pay fees. Marketing efforts seem primarily focused on increasing public acceptance of fees by, for example, explaining how fees have been used to improve the recreational site, indicating that political costs play a significant role.

Basic monopoly pricing theory teaches that a firm with monopoly power would never set price in the inelastic portion of the demand curve because marginal revenue would be negative. However, put in the context of social welfare maximization, federal land managers may charge lower than normal profit maximizing prices in consideration of public aversion to fees. Evidence of this sensitivity to public concerns about fees includes public information campaigns ("Your Fees at Work"), distribution of surveys to provide users the opportunity to give feedback to managers, and differential pricing for equity considerations (discounts to locals, free access days).

Conclusion

The RFDP indicates that given the right incentives, public land managers can be entrepreneurial. Further, the quality of recreational facilities has increased in many areas because the revenue generated by the program has enabled agencies to do such things as increase maintenance and monitoring, refurbish visitor centers, and erect interpretive signs. The extent to which such things have increased utility by increasing the quality of visits or activities is not accounted for in this model, but could be incorporated by modifying the quality adjusted functions of visitation and activities. Federal lands have not become "Disneyfied" under the RFDP and land managers are not insensitive to public concerns about equity and the appropriate level of fees. Because such concerns influence price setting, RFDP site prices are probably set closer to the socially efficient level than to the price that would set by a firm with monopoly power not influenced by political or social costs.

On the other hand, the RFDP has not been an unqualified success. High implementation costs, high costs of monitoring access, and/or low demand could deter land managers from initiating a project under the RFDP. Collection costs have decreased from about 45 percent of revenues to close to 19 percent in the five years of the program. It is also possible that political costs could be so high that some land managers choose not to participate. Concerns that annual federal appropriations would be reduced as fee revenues rise and concerns about the existence of the RFDP beyond 2002 have likely discouraged the creation of some fee demonstration programs. Such problems could be alleviated by making the fee demonstration program permanent and expanding it to all federal lands. Freezing federal allocations to public land management would reduce uncertainty about federal appropriations while also increasing fiscal prudence in federal land management.

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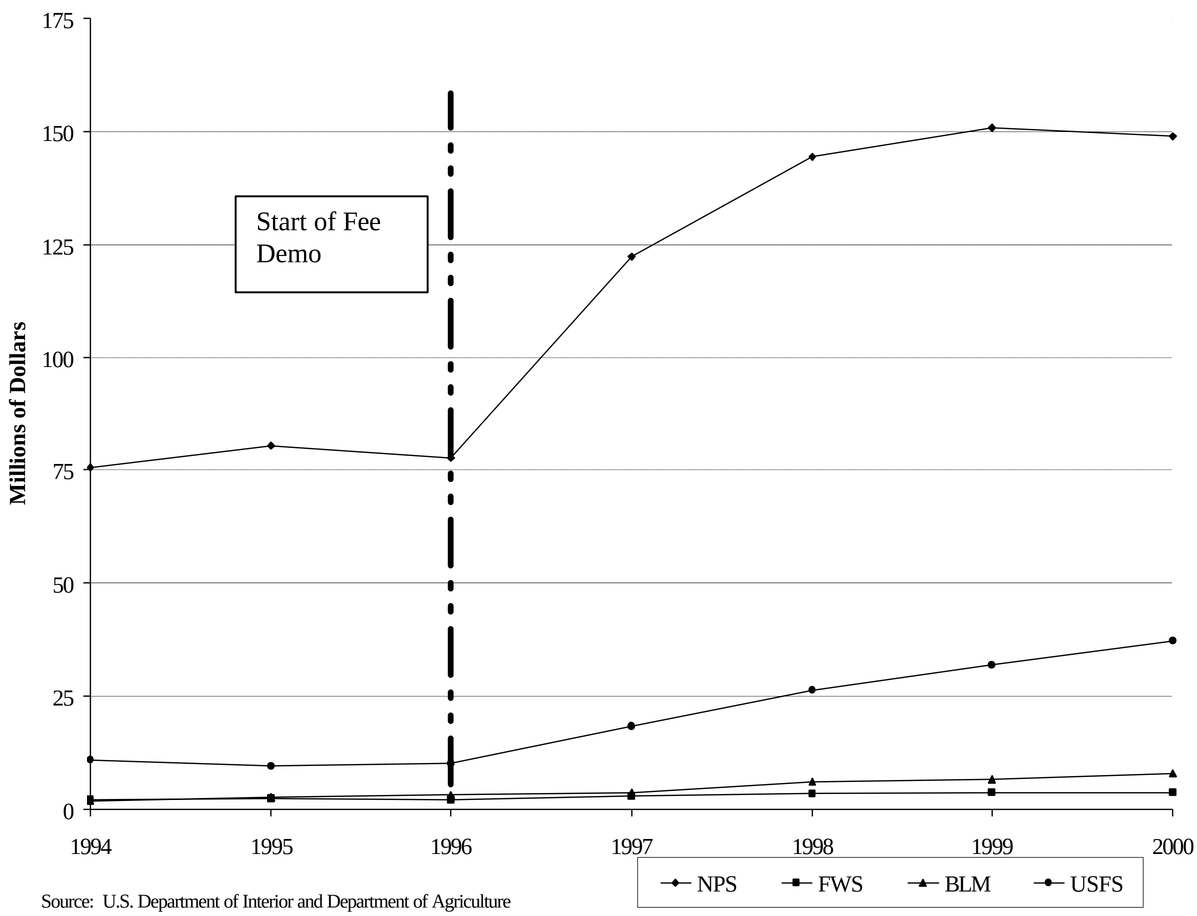
Chart 1: Gross Revenues by Agency



Source: U.S. Department of Interior and Department of Agriculture

BULLETIN BOARD

FOGARTY INTERNATIONAL CENTER

The Fogarty International Center, an institute of the National Institutes of Health (NIH), has announced a new grant program and Request for Applications (RFA TW-03-005). The name of the program is Health, Environment, and Economic Development (HEED).

Summary: This Request for Applications (RFA) is intended to encourage developmental and exploratory research and research capacity-building in developing countries on topics that combine the issues of health, environment and economic development in order to improve scientific understanding of the relationships among those factors, and suggest guidance for policy.

Letter of Intent Deadline: **November 30, 2002**
Application Deadline: **December 30, 2002**

Partners: The Health, Environment, and Economic Development program is a collaboration among five National Institutes of Health (NIH) co-sponsors:

Fogarty International Center (FIC);
National Institute of Environmental Health Sciences (NIEHS);
National Institute of Child Health and Human Development (NICHD);
National Institute on Drug Abuse (NIDA)
Office of Behavioral and Social Sciences Research (OBSSR)

and

The United States Geological Survey (USGS)

For more information, see the web site at:

http://www.nih.gov/fic/programs/HEED.html

KINSHIP CONSERVATION INSTITUTE

The application window has just opened for the 2003 Kinship Conservation Institute (KCI), conducted by PERC--the Center for Free Market Environmentalism. The program is scheduled May 29-June 29, 2003 in Bozeman, Montana. For those who aren't familiar with KCI, it is a month-long program tailored for conservationists who want to further explore the tenets of free market environmentalism and how to integrate it with their environmental work. In addition to lectures, field trips and mentoring with PERC research associates, the fellows have the opportunity to develop a project specific to their conservation work, using market principles.

We are looking for early- to mid-career conservationists who are interested in taking an intense look at how to use market approaches to solve environmental problems. This is a paid fellowship–a $4,500 stipend, lodging and meals–so there will be a high degree of competition. If you are interested in KCI, more information on the institute and how to apply can be found on our Web site:

www.kinshipconservationinstitute.org

The application deadline is **February 3, 2003**.

Carol Ferrie
Kinship Conservation Institute
PERC -- The Center for Free Market Environmentalism
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NATIONAL SCIENCE FOUNDATION

The National Science Foundation's (NSF) Directorate for Social, Behavioral, and Economic Sciences (SBE) offers Minority Postdoctoral Research Fellowships and related supporting activities in an effort to increase the participation of underrepresented groups in selected areas of science in the United States. These fellowships support training and research at the postdoctoral level in a host institution in the areas of social, behavioral, and economic sciences (including history and philosophy of science) supported by NSF. Applicants must be U.S. citizens, nationals, or lawfully admitted permanent residents and recipients of the doctoral degree within the past four years.

The Post-Doc award size is $50,000/year for two years, payable as $36,000 in stipend (paid directly to the Fellow), $9,000 as a research allowance, and $5,000 as an institutional allowance for fringe benefits (including health insurance).

Additionally, travel awards (up to $4,000) are available for graduate students who plan to apply for the postdoctoral fellowship to visit potential sponsors. At the conclusion of the Fellowship, Fellows are eligible to apply for a research start-up grant (up to $50,000).

The deadline for applications is Monday, **December 2, 2002** (annually the first Monday in December). For more information, consult the program announcement at:

http://www.nsf.gov/pubs/2001/nsf00139/nsf00139.html

or contact John Perhonis at 703-292-7279 or jperhoni@nsf.gov.

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FELLOWSHIPS IN ENVIRONMENTAL REGULATORY IMPLEMENTATION

Resources for the Future (RFF) will award fellowships for 2003-2004 for the pursuit of scholarly research that documents the implementation and outcomes of environmental regulations. The objective of the fellowships is to develop a base of scholarship that systematically examines environmental regulations in practice and that can be used to inform regulators, industry, and others on assumptions of environmental laws and policies.

Consideration will only be given to proposals for research that is documentary in nature - that is, research that attempts to describe objectively how a regulation and/or regulations were promulgated and implemented, the reactions to the regulation(s), and the actual outcomes (for example, were new air or water quality standards met?) without arguing in favor of any particular policy or result. The fellowship is not intended to fund studies balancing costs and benefits or conducting other policy analyses of regulations. Case studies of any environmental regulation implemented within the past fifty years in the United States will be considered. There are no restrictions on the disciplinary approach. The research is expected to result in substantial publishable output - for example, a monograph or book.

Eligibility: Scholars from universities and research organizations and who have a doctorate or equivalent degree, or equivalent professional research experience, are eligible to apply.

Duration: Fellowships are for one to two years. Starting dates are flexible. Fellows can be in residence at RFF or remain at their current institution.

Financial Support: Fellows will receive an annual stipend commensurate with experience; research support; office facilities and limited support for relocation, if the recipient chooses to conduct the project at RFF; and funding for travel and conferences. Preference will be given to researchers who have sabbatical or other sources of support from their home institutions. Fellowships do not provide medical insurance or other RFF fringe benefits. Neither Social Security nor tax payments are deducted from the stipend.

Application Materials: No application form is required. The application process proceeds in two stages. In the first stage, individuals interested in applying should submit a pre-proposal that includes the following: (1) full name, title, and professional address (including telephone number and email address) of the applicant; (2) a descriptive name or title of the project; (3) a brief, concise description of the research to be addressed by the project, the importance of the problem to be addressed, and the product (for example, book or monograph) expected to result from the project; (4) a list of the major tasks involved in conducting the project; (5) a schedule for start and completion of the project; (6) a brief statement of prior experience of the applicant; and (7) an estimated budget. The pre-proposal should be limited to two-pages, single-spaced with no smaller than 11-point font and one-inch margins. Applicants whose pre-proposals are selected for further review will then be invited to submit final proposals. Final proposals are limited to ten pages and are to follow a similar format. They must include all of the information contained in the pre-proposal but should offer further detailed description of the proposed research, anticipated contribution of the project, and the importance of the results, and include a curriculum vita with the applicant's educational background, professional experience, list of most relevant publications, and honors and awards received. In addition, final proposals must include three letters of recommendation from fellow faculty members or colleagues (these letters are not included in the ten-page limit).

Outreach and Dissemination: RFF will encourage fellowship recipients in efforts to publish peer-reviewed scholarship. Recipients will also be encouraged to give an RFF Wednesday Seminar and submit publications to *Resources* (RFF's quarterly magazine), the RFF website, and the RFF Press.

Application Deadlines: The pre-proposal for the 2003 fellowships must be received **by January 6, 2003**. Applicants will be notified by January 27, 2003 if they are invited to submit a final proposal. Final proposals must be received by February 28, 2003. The pre-proposal and final proposal materials should be addressed to:

Coordinator for Academic Programs
Resources for the Future
1616 P Street, NW
Washington, DC 20036-1400
Phone: 202-328-5060

Applications sent by fax or email will not be accepted. Awards will be announced in April. RFF is an equal opportunity employer. Women and minority candidates are strongly encouraged to apply. These Fellowships are made possible through a generous grant from the Andrew W. Mellon Foundation.

JOSEPH L. FISHER DOCTORAL DISSERTATION FELLOWSHIPS

In honor of the late Joseph L. Fisher, President of Resources for the Future (RFF) from 1959-1974, RFF will award fellowships for the 2003-2004 academic year in support of doctoral dissertation research on issues related to the environment, natural .resources, or energy. RFF's primary research disciplines are economics and other social sciences. Proposals originating in these fields will have the greatest likelihood of success. Proposals from the physical or biological sciences must have an immediate and obvious link to environmental policy matters to be considered.

Eligibility: This fellowship is intended to be the principal source of support for graduate students in the final year of their dissertation research. The fellowship will be reduced by the amount of any other financial assistance, which must be disclosed to RFF. Fellowship candidates must have completed the preliminary examinations for the doctorate not later than February 1 prior to the application deadline. This requirement will be strictly enforced.

Stipend: The fellowships carry a stipend of $12,000 for the 2003-2004 academic year. Under the Tax Reform Act of 1986, most if not all of this stipend will probably be taxable income. It is expected that fellowship recipients will not engage in full-time employment during the period of fellowship tenure.

Application Materials: No application form is required. Graduate students interested in applying for a Joseph L. Fisher Dissertation Award should submit the following:

- a brief letter of application and a curriculum vita;
- a graduate school transcript;
- a one-page abstract of the dissertation;
- a technical summary of the dissertation not to exceed 2,500 words in length (not including the bibliography); it should describe clearly the aim of the dissertation, its significance in relation to the existing literature, and the research methods and data to be used;
- a letter from the department chair or other university official certifying the student's doctoral candidacy; and
- two letters of recommendation from faculty members on the student's dissertation committee.

Application Deadline: Application materials for dissertation support must be received **by February 28, 2003**, and should be addressed to:

Coordinator for Academic Programs
Resources for the Future
1616 P Street, NW
Washington, DC 20036-1400 USA
Phone: 202- 328-5060

Applications sent by fax or email will not be accepted. Awards will be announced in April. RFF is an equal opportunity employer. Women and minority candidates are strongly encouraged to apply.

GILBERT F. WHITE POSTDOCTORAL FELLOWSHIP PROGRAM

Resources for the Future (RFF) offers two resident fellowships for the 2003-2004 academic year in honor of Gilbert F. White, retired chairman of the RFF board of directors, distinguished geographer, and statesman of science. The fellowships are intended for researchers who have a doctorate degree and wish to devote a year to scholarly work in areas related to natural resources, energy, or the environment. Social scientists as well as natural scientists interested in policy-relevant interdisciplinary research are encouraged to apply. Since fellows will interact closely with RFF staff members, selection criteria will include the nature of the applicant's proposed research program and how it fits with RFF work in progress.

Eligibility: The award is open to individuals in any discipline who have completed their doctoral requirements by the beginning of the 2003-2004 academic year. Teaching and/or research experience at the postdoctoral level is preferred though not essential. Individuals holding positions in government as well as at academic institutions are eligible.

Duration: Gilbert White Fellows are normally in residence at RFF for eleven months. Fellows reside in one of RFF's three research divisions: Energy and Natural Resources, Quality of the Environment, or Risk, Resource, and Environmental Management.

Stipend: Fellows receive an annual stipend based upon their current salary, plus research support, office facilities at RFF, and an allowance of up to $1,000 for moving or living expenses. This stipend may be supplemented from other sources if the supplement does not divert the fellow from his or her research. Typically, visiting fellows have sabbatical support from their home institutions. Fellowships do not provide medical insurance or other RFF fringe benefits. Neither Social Security nor tax payments are deducted from the stipend.

Application Materials: No application form is required. Individuals interested in applying for a Gilbert F. White Postdoctoral Fellowship should submit the following:

- a brief letter of application and a curriculum vita to include educational background, professional experience, and honors/awards received;
- a list of publications and a description of significant research completed but not published;
- a statement of proposed research (not more than ten pages typewritten and double-spaced). The proposal should address the main hypothesis or major objective of the research, and should include a description of the methods to be used as well as an explanation of the anticipated contribution of the project and why the results are important. Since Gilbert White Fellows interact closely with RFF staff members, the proposal should also contain a discussion of how the work fits with current RFF research and how an association would be mutually beneficial; a project budget; and three letters of recommendation from fellow faculty members or colleagues.

Application Deadline: Application materials for the 2003-2004 fellowships must be received **by February 28, 2003**, and should be addressed to:

Coordinator for Academic Programs
Resources for the Future
1616 P Street, NW
Washington, DC 20036-1400
Phone: 202- 328-5060

Applications sent by fax or email will not be accepted. Awards will be announced in April. RFF is an equal opportunity employer. Women and minority candidates are strongly encouraged to apply. For more information about RFF, see its web page at: www.rff.org.

UNIVERSITY OF CALIFORNIA, SANTA BARBARA (UCSB)

NSF Funded Fellowships for PhD in Economics and Environmental Science

The University of California, Santa Barbara (UCSB) expects to offer up to ten 3-5 year full fellowships this year for its National Science Foundation (NSF)-funded program in Economics and Environmental Science (EES). NSF rules restrict fellowships to U.S. Citizens and Permanent Residents. The EES program involves a rigorous Ph.D. curriculum in economics combined with Ph.D.-level training in an area of natural science. Students apply to and receive their Ph.D. from either the Department of Economics or the Bren School of Environmental Science and Management. For more information, consult **www.ees.ucsb.edu**. Deadline for applications is **February 1, 2003.**

UNIVERSITY OF WYOMING

Graduate Programs in Economics and Finance

The University of Wyoming offers world-class programs taught by well-known faculty. Recent accolades earned by graduates and faculty include:

- **Graduates:** Two recent Ph.D. graduates have served on the President's Council of Economic Advisers in the last five years (Jason Shogren and John List).
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- **An International Reputation**. Our work in the area of environment and natural resources and applied microeconomics is respected worldwide.
- **Solid Placement**. Our students have done well on the job market, with recent academic placements at Cambridge (U.K.), Maryland, Arizona, Bates, Central Florida, Colorado State, Iowa State, New Mexico State, Oklahoma State, Oregon State, and Tulsa to name but a few. Nonacademic employers at regulatory agencies, financial institutions, investment banking firms, energy corporations, and management consulting firms around the world also pursue our Ph.D. and Master's students.
- **Great Natural Environment**. Laramie offers a wide variety of outdoor amenities. Excellent hiking, fishing, climbing, biking, and skiing are only minutes away from campus.

For complete information, see the web site at: **http://business.uwyo.edu/ef**

Interested students may contact:
Robert Godby, Director of Graduate Studies
Department of Economics and Finance
P.O. Box 3985
162 Ross Hall
Laramie, WY 82071-3985
Telephone: (307) 766-3843
econfinance@uwyo.edu

POSITION ANNOUNCEMENTS

University of Rhode Island (URI):

The University of Rhode Island (URI) seeks a tenure-track, academic-year, Assistant Professor for Environmental and Natural Resource Economics for the Fall of 2003. Teach graduate and undergraduate environmental and natural resource economics courses and conduct research. Required: Ph.D. in economics, resource economics, or closely-related field; strong foundation in microeconomic theory and modeling; demonstrated interest or training in environmental or natural resource problems; ability to teach graduate environmental or natural resource economics and innovative undergraduate courses; and ability for nationally recognized externally-funded research. Successful candidates must have demonstrated interests in environmental or natural resource use issues, such as, but not limited to: critical habitat management; fisheries and marine resources; market-based or rights-based approaches to resource management; natural resource trade; coastal issues; water or estuarine pollution; sustainability; and biodiversity. Visit our website at:

http://www.uri.edu/human_resources

for a complete statement of qualifications. Send letter of application, statement of teaching and research interest, curriculum vita, copy of transcripts, samples of recent research, three letters of reference and other supporting materials **by January 21, 2003** to: **Stephen Swallow, Search Chair, (Req # AER010160), University of Rhode Island, P.O. Box G, Kingston, RI 02881.** URI is an AA/EEO employer and values diversity.

PUBLICATIONS

Resources for the Future (RFF Press):

Prices listed reflect a 20% AERE discount on books from RFF Press. To use your AERE discount use the following **order code: DNA**

New from RFF Press:

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Technological Change and the Environment / Arnulf Grübler, Nebojsa Nakicenovic, and William D. Nordhaus, editors / October 2002 / 400 pages / Cloth, 1-891853-46-5, $49.00

The Contextual Determinants of Malaria / Elizabeth A. Casman and Hadi Dowlatabadi, editors / October 2002 / 382 pages / Cloth, ISBN 1-891853-19-8, $75.00

Policy Instruments for Environmental and Natural Resource Management / Thomas Sterner / November 2002 / approx. 426 pages / Cloth, ISBN 1-891853-13-9, $75.00 / Paper, ISBN 1-891853-12-0, $36.95

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Battling Resistance to Antibiotics and Pesticides: An Economic Approach / Ramanan Laxminarayan, editor / December 2002 / approx. 400 pages / Cloth, ISBN 1-891853-51-1 / $65.00

Natural States: The Environmental Imagination in Maine, Oregon, and the Nation / Richard W. Judd and Christopher S. Beach / February 2003 / approx. 256 pages / Cloth, ISBN 1-891853-59-7, $32.95 / Paper, ISBN 1-891853-60-0, $19.95

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http://www.rff.org/books/index.htm

Telephone orders may be placed with RFF's Customer Service and charged to MasterCard, Visa, or American Express by calling (410) 516-6955. To use your AERE discount use the following **order code: DNA**