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# Minnesota **Applied** Economist

No. 716 Fall 2005 / Winter 2006

A Newsletter for Alumni and Friends of the Department of Applied Economics University of Minnesota

## *Department Head's Notes*

On October 31 more than 100 participants in a University-wide forum explored the meaning and importance of public engagement in a great research university. The Web site for the newly established Office of Public Engagement defines engagement as follows.

...the partnership of university knowledge and resources with those of the public and private sectors to enrich scholarship, research, and creative activity; enhance curriculum, teaching, and learning; prepare educated, engaged citizens; strengthen democratic values and civic responsibility; address critical societal issues; and contribute to the public good.

This partnership is a two-way process. It is a logical extension and expansion of our traditional Land Grant mission through which the University and the broad community we serve, enrich and revitalize each other.

### **Student Engagement Plans Reach Beyond the Classroom**

For me, one of the most exciting aspects of the new initiative on public engagement is the emphasis being placed on student involvement. Our department is already at the forefront of this effort. This past fall students in our orientation class (ApEc 1001), which is taught by Undergraduate Program Coordinator Gary Cooper, spent several sessions creating an "Intentional Plan of Engagement." These sessions were led by staff from the University's Office of Student Development. They were designed to help our students develop personalized plans for using experiences outside of the classroom to develop skills in five critical areas; adaptability, communications, conflict management, critical thinking, and development

of meaningful relationships. A student's plan might include volunteer activities, involvement with student organizations, study abroad, a research experience, and/or an internship.

A group of students taking a "special problems" class on entrepreneurship with Professor Ward Nefstead put these concepts into action this past semester. With the help of the Southeast Sustainable Regional Partnership, they were contacted by an entrepreneur from southeast Minnesota interested in developing a business plan for a fruit processing operation. Working with the entrepreneur gave the students a great opportunity to develop their own skills in finance, planning, marketing, communications, and team building. The end result was a sound business plan and a great experience for our students.

*(Continued on page 2.)*

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*(Department Head Notes continued from Page 1.)*

### Your Help Is Needed

Friends and alumni can help us offer more public engagement opportunities for our students. I would be happy to hear from you about ideas you have for projects and activities. Also, I encourage you to enter information on the St. Paul Campus Career Center “Building Bridges” Web site. The URL is as follows.

<http://alumni.coafes.umn.edu/bb>

This new initiative, developed in collaboration with the New College Alumni Society, gives alumni, friends, and potential employers a chance to share information that can help establish connections with our students. In the process, it will help us strengthen the partnerships that are the necessary foundation for effective public engagement.

### *Upcoming Events*

For further information on these and future events, see the departmental website:

<http://www.apec.umn.edu/DeptEMS.html>

**March 31 - Applied Economics Seminar** with Robert Town, School of Public Health, on “The Welfare Consequences of Hospital Mergers.”

**April 3 - Environmental & Resource Economics Seminar** with Steve Polasky, Topic TBA.

**April 10 - Environmental & Resource Economics Seminar** with Frances Homans, Topic TBA.

**April 17 - Environmental & Resource Economics Seminar** with Donald Hansen from Argonne National Laboratory on “Modeling Energy Supply, Demand, and Technology.”

**April 21 - Applied Economics Seminar** with Brian McCall from Carlson School of Management on “Decoupling the Sources of Earnings Inequalities Within and Across Industries.”

## **Recent Department Alumnus Passed Away This Fall**



Lance Sannes, a 2005 University graduate and former University of Minnesota football player, died of cardiac arrest on October 16, 2005. Lance earned his B.S. degree in agriculture, food, and business management. His advisor was Gerard McCullough, who had this to say about Lance.

Lance Sannes did not have to introduce himself when he first became my advisee. I knew that he played on the offensive line for the Gophers, and he was the only one of my advisees who filled the doorway when he came to my office. We spent much of our time talking about the economics of sports—especially the economics of football. What impressed me about Lance was his deep interest in both economics and sport. He approached these with a keen intelligence and a ready sense of humor. I pointed out to him that Bill Belichick, the highly successful coach of the New England Patriots, had been an economics major at Wesleyan and used optimization and statistical analysis in his game planning. Lance understood immediately. We talked about the possibility of Lance doing graduate work in applied economics and focusing on the economics of sports. He’d have been an excellent researcher and an excellent teacher.

Sannes was a native of Wahpeton, ND, and, last fall, was working at a real-estate development company in St. Louis Park, MN. He also refereed high school basketball and lacrosse games in his spare time and was preparing to referee Division III basketball games in the winter of 2005–06. We send our heartfelt condolences to his family and friends.

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## *Department Welcomes Its Newest Faculty Members*



### **Clarissa Yeap**

Professor Clarissa Yeap, a native of Singapore, joined our department this fall as an assistant professor in the areas of industrial organization and food marketing. Clarissa received her A.B. with a major in economics from Dartmouth College, her M.Sc. in econometrics

and mathematical economics from the London School of Economics, and her A.M. and Ph.D. in economics from the University of Chicago.

In her recently completed dissertation, “Competition and Market Structure in the Food Services Industry,” Clarissa used establishment-level data from the Economic Census and Population Census to explore questions of theoretical importance to economists and practical interest to the food industry. She will continue to work with census data to refine her analyses of industrial organization issues in the food industry. In earlier work, Clarissa also explored issues of competition and firm integration in the cable television industry and Personal Communications Services (PCS) spectrum auctions.

In the spring semester, Clarissa is co-teaching APEC 4821, Agribusiness Management, with Vernon Eidman. In the 2006-07 academic year, she will teach three classes: APEC 4451, Food Marketing, with Jean Kinsey; APEC 8803, Marketing/Managerial Economics, with Donald Liu; and APEC 4821, Agribusiness Management.

Members of the department are very excited to have Clarissa on board and look forward to watching her research and teaching programs flourish in the years to come.



### **Judy Temple**

Professor Judy Temple joined us from the Department of Economics at Northern Illinois University, where she’s served on the faculty since 1989. Judy carries a joint appointment between our department and the Humphrey Institute for

Public Affairs, and also has an adjunct appointment in the Institute of Child Development. Judy received her B.A. in economics at the University of Wisconsin-Madison and earned her M.A. and Ph.D. degrees in economics at Michigan State University.

Judy’s current research includes estimating the long-term benefits of early childhood education. Her research also investigates the determinants of educational attainment as well as the effects of school policies such as grade retention and special education placement. Another strand of research includes topics in state and local public finance.

Arriving in January 2006, Judy hit the ground running with a lecture titled, “Cost Effectiveness in Early Intervention,” about cost savings to society brought about by early childhood education, given with co-author Arthur Reynolds from Child Development. She is also co-teaching a Ph.D. graduate seminar course with Ford Runge.

We look forward to the contributions that Judy will bring to the department’s program.

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## ***The Department Hosted Three FEP Visiting Scholars This Fall***

As part of the USDA Faculty Exchange Program (FEP), the department welcomed three scholars from Tunisia, Russia, and Bulgaria. This is the sixth year the department has participated in this program. While here from August through mid-December 2005, the visiting scholars observed our teaching methods, developed courses to teach at their home universities, participated in a variety of field trips at the state and national level, and two of them presented seminars in the department. Here is a brief introduction to each our three FEP visiting scholars.



*USDA Faculty Exchange Program (FEP) visitors  
(l to r): D. Docheva, D. Mehouchi, and A. Arkhiereeva.*

### **Anna Arkhiereeva, Bashkir State Agrarian University in Ufa, Russia**

Anna received her diploma with a concentration in accounting and auditing in 1999 and her candidate degree in 2003. Her thesis was on monitoring the development of regional agriculture, taking into account financial stability and economic cycles. Anna has worked as a researcher at the Social-Economic Research Institute of [xx the?] Ufa Scientific Center since 2002, where she is helping to develop a 10-year social-economic development plan for the Republic of Bashkortostan. She also teaches courses in investment strategy and the securities markets. While here in the department, Anna presented a seminar entitled, “Bashkortostan Agriculture: Importance, Problems, and Perspectives.” To view the

PowerPoint slides from her presentation, please visit [http://www.apec.umn.edu/documents/AArkhiereeva\\_Seminar05.pdf](http://www.apec.umn.edu/documents/AArkhiereeva_Seminar05.pdf).

### **Dimitrina Docheva, Trakia University, Bulgaria**

Dimitrina received her master’s degree in 2002 in agricultural economics, specializing in agricultural finance. She is currently a Ph.D. student and teaching assistant in the Department of Management. She currently conducts seminars for courses in agricultural finance and international trade and, in the future, hopes to teach agricultural finance, agricultural credit markets, and financial management. While here, Dimitrina presented a seminar entitled, “Agricultural Financial Markets in Bulgaria—The Current State and Perspectives for Future Development.” To view the PowerPoint slides from her presentation, please visit <http://www.apec.umn.edu/documents/AgriculturalFinancialMarkets-Bulgaria.pdf>.

### **Driss Mehouchi, Ecole Supérieure d’Agriculture du Kef, Tunisia**

Driss has been teaching in the economics department since 1994. He currently teaches accounting, management, and applied microeconomics. In 1998 he studied rural development and project analysis in France and, in 1997, studied rural economics in Canada.

The FEP program funds overseas faculty for six months in the U.S. and also funds return visits from U.S. faculty members, who will meet with the visitors in their home universities next academic year. At the University of Minnesota, the FEP program is coordinated by John Vreyens with the Office of International Agricultural Programs in COAFES, and by Glenn Pederson in the Department of Applied Economics. Other department members who participated by actively mentoring our visitors, include Ed Usset, Bill Lazarus, and Jeff Apland.



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## ***Three New International Visiting Scholars Arrived in the Department this Fall***



### **Jozef Barnak**

Professor Jozef Barnak came to Minnesota from the Department of Marketing and Management at the Legnica School of Management and from the Agribusiness Department at the Agricultural University in

Krakow, Poland. At these two institutions he has been involved in teaching marketing and management courses in English.

While here, he got to know the teaching curricula and teaching methods used in marketing and management courses at a U.S. university. He also worked on his research project titled, "Comparative studies of the organization and functioning of marketing systems for agricultural and food products in the U.S. and in Poland."

Professor Barnak arrived in September and was with us through February 28, 2006. Ben Senauer was his faculty host during his visit.



### **Toyokazu Naito**

Professor Toyokazu Naito is visiting the department from the Department of Economics at Kyoto Gakuen University in Kyoto, Japan. His research interests are resource eco-

nomics, applied econometrics, and applied game theory.

Professor Naito will be in the department for his one-year sabbatical, through August 2006. During his visit, he plans to work on both theoretical and empirical research about common property resources with Steve Polasky, who is his faculty host.



### **Gerald Ortmann**

Professor Ortmann spent slightly more than four months in the department, from late July through early December. He is a faculty member in the Department of Agricultural Economics at the University of KwaZulu-Natal in

Pietermaritzburg, South Africa. Professor Ortmann's research interests include production economics, farm and agribusiness management, and institutional economics. During his visit, he worked on his sabbatical project titled, "Promoting the Competitiveness of Small-Scale Farmers in South Africa by Facilitating Access to Agribusiness Value Chains." Based on that work, Professor Ortmann and Rob King, his faculty host, co-authored a paper titled "Small-Scale Farmers in South Africa: Can Agricultural Cooperatives Facilitate Access to Input and Product Markets?" (Staff Paper P06-4). Professor Ortmann also interacted with faculty regarding Center for International Food and Agricultural Policy initiatives in South Africa.

The Department benefits greatly by hosting visiting scholars. They share new ideas and perspectives with us, and their visits are often the starting point for longer term professional collaboration. At the same time, their connections with us help increase our visibility around the world.

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## ***Three Students Received Departmental Scholarships This Year***

Congratulations go out to the three undergraduate students—Michael Boerboom, Crystal Lehnertz, and Kristyna Schultz—who were awarded scholarships by the department for this academic year, 2005-2006.

### **Willis Peterson Scholarship Recipients**

Michael Boerboom is a sophomore majoring in agricultural and food business management. Michael grew up on a family-owned and operated farm outside Marshall, MN. In his work on the farm, he gained experience caring for animals, managing a feed mill, maintaining machines and barns, keeping farm records, and working in finishing barns. He also served many years with the 4H–Lyons County Fair.

Kristyna Schultz is a junior majoring in agricultural and food business management, with a minor in scientific and technical communication. Kristyna has been on the Dean’s list every semester. Last year, she served on the COAFES Curriculum Review Committee. She currently serves on the COAFES Scholastic Affairs Committee and the Applied Economics Undergraduate Program Committee. Kristyna has been very active with FFA (formerly Future Farmers of America), having served in the roles of chapter president, regional president, and state president. She is from Litchfield, MN.

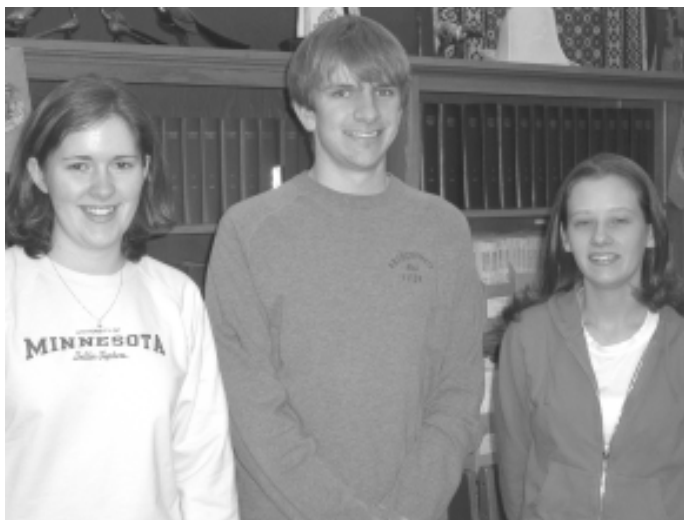
The Willis Peterson Scholarship allows undergraduate students to pursue their interest in economics. The award was established by the colleagues, friends, and relatives

of Professor Emeritus Willis Peterson to honor his memory. For many years Professor Peterson taught two courses—“Principles of Microeconomics” and “Principles of Macroeconomics”—and won the University’s highest award for teaching excellence, the Horace T. Morse–Minnesota Alumni Association Award for outstanding contributions to undergraduate education.

### **Hal Routhe Scholarship Recipient**

Crystal Lehnertz is a junior majoring in agricultural and food business management, with an emphasis in finance and a minor in environmental horticulture. Crystal grew up on a farm near Plainview in southeastern Minnesota, and has been actively involved with the University of Minnesota Horticulture Club and the FFA.

The Hal Routhe Scholarship is awarded to an upper-division undergraduate student with an interest in agricultural finance. This scholarship was set up to honor Harlund (Hal) Routhe, Professor Emeritus, University of Minnesota. Hal graduated from the College of Agriculture in 1951 with a B.S. in agricultural economics in 1951, and earned a master’s degree in 1954. Hal devoted his career to the University of Minnesota, as a 4-H leader, as an applied and agricultural extension economist, as program director of agriculture and related industries, and as associate director of the Minnesota Extension Service. Hal created this scholarship because of his continuing interest in agriculture and education.



*Kristyna Schultz, Michael Boerboom & Crystal Lehnertz*

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## ***Opportunities to Network with Graduate Students***

Last July the Board of Regents approved sweeping changes in our graduate program. Faculty from the Division of Health Services Research and Policy in the School of Public Health, from the Hubert H. Humphrey Institute of Public Affairs, and from the Department of Human Resources and Industrial Relations in the Carlson School of Management have joined our graduate faculty. This is enabling us to expand learning opportunities for our students and is creating exciting new opportunities for research collaboration.

As our scholarly community within the University expands, we also want to strengthen the much broader community that includes graduates from our graduate program. New connections may include mentoring relationships, internships, opportunities to meet students at Departmental events, or sharing information on students entering the job market. This is consistent with the new emphasis on public engagement featured in the

“Department Head’s Notes” section in this issue of *Minnesota Applied Economist*. Strengthening our connections with M.S. and Ph.D. program alumni will help us build a truly great applied economics program. It will also give our alumni, wherever they may be located, better access to the stream of bright, well-trained students who graduate from our program each year,

We hope to use the “Building Bridges” web site described in the “Department Head’s Notes”

(<http://alumni.coafes.umn.edu/bb>) to facilitate this community building. The St. Paul Campus Career Center is working closely with our faculty and students in this effort. We will use information from this data base to develop networking opportunities for graduate program students, alumni, and faculty. We encourage all graduate program alumni to help us with this effort.

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## ***Creating a New Expanded College***

On June 10, 2005 the Board of Regents approved a set of recommendations from President Bruininks for University strategic positioning. The resolution approved by the Regents includes the integration of the programs now in the College of Agricultural, Food, and Environmental Sciences; the College of Natural Resources; and the Nutrition program from the College of Human Ecology.

In early September, President Bruininks appointed faculty, staff, students, and stakeholders to a task force charged with setting the direction for the new, expanded college. The task force worked through the fall to develop recommendations on how the new, expanded college can achieve higher levels of excellence in teaching, research, extension, and engagement. Twenty working groups—made up of faculty, staff, students, and alumni—were established to support the task force.

The Department of Applied Economics was well-represented in this process; Professor Steve Polasky served

on the task force, and twelve other faculty, staff, and students participated in working groups. The task force released its final report on February 3 and recommends significant structural changes in the college. Specifically, the task force made two main recommendations, as follows: 1) establish a University-wide Institute of the Environment; and 2) develop a number of initiatives that will attract stronger students, allowing the college to be even more responsive to the public good. If you’d like to read the complete report, please visit the college Web site at the following address.

[http://www1.umn.edu/systemwide/strategic\\_positioning/tf\\_final\\_reports/cnr\\_coafes\\_che\\_final.pdf](http://www1.umn.edu/systemwide/strategic_positioning/tf_final_reports/cnr_coafes_che_final.pdf)

The proposed name for the New College - College of Food, Agricultural, and Natural Resource Sciences - will be considered for approval by the Regents at their March meeting.



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## ***New Lecture Series Inaugurated***

The department is pleased to announce an annual series of four lectures that are being sponsored jointly by the Center for International Food and Agricultural Policy (CIFAP), the Center for International Science and Technology Practice and Policy (InSTePP), the Food Industry Center (TFIC), the Fesler-Lampert Chair, and the Department of Applied Economics. Each of the lectures in the series is named to honor an outstanding member of the department's faculty—past, or present and emeritus. The four lectures, which are free and open to the public, are as follows.

- The Willard W. Cochrane Lecture on Public Policy
- The Philip M. Raup Lecture on Land and Environmental Policy
- The James P. Houck Lecture on Food and Consumer Policy
- The Vernon W. Ruttan Lecture on Science and Development Policy

These four lectures will be offered annually, on a recurring basis, and will complement the regular departmental series of seminars.

### **Ambassador Yeutter Presented the First Lecture in the Series**

The first lecture in the series, the Cochrane Lecture, was

given on November 30, 2005, by Ambassador Clayton Yeutter, the former U.S. trade representative and secretary of agriculture. His talk is summarized in this issue of *MAE* on page 9 (“U.S. Farm Policy at the Crossroads”) and online at

<http://agecon.lib.umn.edu/mn/wp05-03.pdf>.

### **Upcoming Lectures in the Series**

Dr. Emery Castle, professor emeritus from the Department of Agricultural and Resource Economics at Oregon State University, will present the next lecture in the series, the Philip M. Raup Lecture. Dr. Castle will give a lecture entitled, “The Separation of Powers—Federal, State, Local—and Environmental Public Policy,” on March 9, 2006 at 3:00 p.m. in the Cargill Building for Microbial and Plant Genomics on the St. Paul Campus. Additional information can be found online at

<http://www.apec.umn.edu/rauplecture>.

The final two lectures in the series have also been scheduled. Juan Enriquez-Cabot of Harvard University will deliver the James P. Houck Lecture on May 16, 2006 and Richard Nelson of Columbia University will present the Vernon W. Ruttan lecture in October.

For more details about these upcoming lectures, keep your eyes on the departmental website and future issues of *MAE*.



*Professor Emeritus Willard Cochrane and Ambassador Clayton Yeutter*

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## ***U.S. Farm Policy at the Crossroads***

*C. Ford Runge*

On November 30, 2005, Ambassador Clayton Yeutter, former U.S. trade representative and secretary of agriculture, presented the inaugural Willard W. Cochrane Lecture in Public Policy. His lecture, “U.S. Farm Policy—At a Crossroads? The 2007 Farm Bill and the Doha Round,” provided key insights from an experienced negotiator in both the trade and legislative arenas. In his lecture, Yeutter warned of the difficulties of putting together a trade deal given the global resistance to liberalization in agriculture. This resistance comes not only from U.S., European, and Japanese farmers, but also from developing countries that are loathe to open their markets, many of which remain protected. In addition, said Yeutter, the expiration under U.S. law of the Trade Promotion Authority (“fast-track”) in July 2007, makes the timing of both the farm bill and Doha round highly problematic because a successful trade round depends on trade negotiating authority.

### **Government Subsidies Should Be Reduced**

In assessing the current state of U.S. agricultural policy, Yeutter argued for a gradual shift in responsibility for the coverage of farm risks from the public to the private sector. He noted, “Our present safety net is complicated, costly to administer, and its benefits tilt heavily toward large producers, and toward the producers of only five major commodities (wheat, corn, cotton, rice, and soybeans). Those benefits are also rapidly capitalized into land values, often boosting the net worth of absentee landowners, while also reducing our international competitiveness and making it extremely difficult for young people to start farming. In addition, some aspects of our commodity programs may well be vulnerable to challenge under international rules.”

### **U.S. Agriculture Will Grow Only by Boosting Exports**

The current international trade rules are a problem in the Doha Round negotiations, and the failure to reach agreement over agriculture has slowed progress to a crawl, despite their importance to U.S. agriculture. As Yeutter observed, “The Doha Round of trade negotiations can, and should, complement and support whatever domes-

tic policy-changes are in order. Domestic demand alone will never again support a vibrant, prosperous American agriculture. Our opportunities for market growth, particularly in commodities, lie outside the borders of the U.S. Those opportunities are primarily in developing countries, whose per capita incomes are on the rise. Most of those countries are in Asia and access to their markets should be our first priority in the Doha Round negotiations. If we succeed in that endeavor, adjustments (which will be necessary no matter what happens in the Doha Round) in our domestic farm programs will be much more palatable to U.S. farmers.”

### **In the Future Green Agricultural Programs Will Be Important**

Finally, Yeutter emphasized the key future role of “green” programs in agriculture and the need to revitalize rural infrastructure. He noted that much of the money now spent on commodity programs could better be directed to “a variety of programs that are not likely to run afoul of international rules, with benefits that can reach more rural residents than our present programs, and do so in a more equitable way. Included would be environmental programs that are already authorized and regularly over-subscribed, new environmental programs, a variety of energy generation possibilities, opportunities provided by biotechnology, tree planting for carbon fixation, industrial uses of farm products, and both hard and soft infrastructure investments.”

Would you like to receive the  
**Minnesota Applied Economist**  
electronically?

Do you have suggestions on how  
we can improve this newsletter?

We would love to hear from you!  
Please contact us at  
***[apecmae@umn.edu](mailto:apecmae@umn.edu)***

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## ***Houck Memorial Scholarship Fund***

In 2001 the Minnesota Council on Economic Education established a memorial scholarship fund in honor of James P. Houck, a former head of the Department of Applied Economics and long-time friend and mentor to the Council.

Professor Houck was actively involved on the Council's board for many years, giving the organization an institutional home when it left the College of Education in 1992. "He was our champion, providing leadership at a challenging time in the Council's history," says Council Executive Director Claudia Parliament. "We would not be where we are today without his guidance and unwavering support."

### **Houck Scholars Gain Valuable Experience in Economics**

The James P. Houck Memorial Scholarship Fund, now an endowed fund held at the University of Minnesota Foundation, was established to encourage Minnesota K-12 classroom educators to seek additional educa-

tion in economics. Since the fund was established in 2001, six Minnesota teachers have benefited from the fund. In the summer of 2005, Emily Widen, an economics teacher at Blaine High School, received a Houck scholarship to take a microeconomics class in the department. Says Ms. Widen, "Taking the intermediate-level economics course was a great experience for me, I came away with a deeper understanding of the economic principles I teach. Now I can truly see the difference in my students' eyes, as they are better able to grasp tough concepts because my teaching ability has improved."

In addition, taking microeconomics at the University allowed Ms. Widen to be approved as a College-in-the-Schools (CIS) instructor at Blaine High School. "Because of the scholarship," she said, "Blaine High School students can reap the benefits of another CIS class being offered in their school." Professor Houck "understood the value of continuing education," says Jim Hammill, a long-time friend and colleague. "He would be thrilled to know that Minnesota teachers are benefiting from this wonderful legacy – now and well into the future."

### **Houck's Career Took Him Worldwide**

Professor Houck had a distinguished career as an economist and educator. He served on the faculties of Pennsylvania State University and Harvard University, before joining the University of Minnesota in 1965, where he served as head of the Department of Applied Economics from 1990-1998. "Jim articulated a clear vision for a great applied economics department," says current Department Head Rob King. "That vision, which includes the outstanding work on economic education done by the Council, still helps to shape what we do today."

While a member of the University faculty, Professor Houck worked overseas in Bangkok and Sydney. In addition, he spent shorter periods teaching and conducting research in other parts of the world such as Africa, South America, and Europe. In 1969, in response to the assassination of Dr. Martin Luther King, Jr., Professor Houck spent a three-month leave teaching at A&T State University, a historically black university located in Greensboro, North Carolina.



*Margaret (Peg) Houck helps acknowledge the University of Minnesota Foundation's President's Club Award (presented to the Council for funds raised to support the scholarship endowment) at the Council's 2005 annual meeting.*

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## Houck's Accomplishments in Economics Were Many

Professor Houck was prominent in the American Agricultural Economics Association (AAEA) and served in many leadership positions, including the presidency. In recognition of his many contributions to agricultural economics, Professor Houck was elected a Fellow of the AAEA in 1997. He wrote a widely used textbook, *Elements of Agricultural Trade Policies*, which has been translated into Spanish, Russian, Chinese, and Polish. Says department alumnus, Dick Todd, who is vice president for Community Affairs at the Federal Reserve Bank of Minneapolis, "Jim cared about communicating economic ideas clearly and to a wide audience. He wanted people, as citizens, to understand that economic policy decisions mattered. He worked hard to find clear, simple, robust ways of getting theoretical and factual points across." Added Todd, "I think Jim would be very happy to see how these scholarship recipients and other teachers trained by the Council, are preparing our young people to become informed participants in the global economy."

For additional information about the Houck Memorial Scholarship Fund and the Minnesota Council on Economic Education—or to make a financial contribution to either—please call the Council at 612-625-3727 or visit the Council's Web site at [www.mcee.umn.edu](http://www.mcee.umn.edu). Contributions to the Houck Memorial Scholarship Fund can also be made through the University of Minnesota Foundation at <http://www.giving.umn.edu/>.



*Jim Houck shares a lesson with a Franklin Music Magnet student at the MN Council's annual meeting in 1995.*

## RECENT PUBLICATIONS

For information on locating a copy of a publication not available on the Internet, contact the underlined author at the department by calling 612-625-1222.

### *Consumption and Household Economics*

#### **Emerging Research and Public Policy Issues for a Sustainable Global Food Network by Jean Kinsey.**

This paper presents research questions and policy issues related to three emerging issues pertinent to developments in the global food and agricultural supply network. Developments in the production and delivery of food to consumers are rapid, prolific, and extreme. We have gone from a farmer-centric to a consumer-centric food system. The changes are forcing us to revise our thinking about the organization and operation of the food supply chain one-hundred and eighty degrees, and to challenge old assumptions about who sets standards and who decides what will be produced. Public policies, which typically lag the world of commerce, will need to learn their relevance and catch up with dramatic changes in the way business is being conducted. University of Minnesota, The Food Industry Center Working Paper 05-04, 2005. <http://agecon.lib.umn.edu/mn/tr05-04.pdf>

#### **The Empirics of Information Sharing in Supply Chains: The Case of the Food Industry by Hamid Mohtadi.**

Using the Supermarket Panel Data gathered by The Food Industry Center at the University of Minnesota, the behavior of food retailers is examined in their adoption of information technologies that facilitate information exchange with suppliers. Using a theoretical framework developed by Mohtadi and Kinsey (2004), the predictions of that paper are examined. Logistic regressions based on maximum likelihood estimation, support the hypothesis that food retailers with greater market power and numerous suppliers are more inclined to share, rather than to withhold, sales information. Stock-outs play a key role in the process as well. Finally, the structure of the market plays an interesting role in the type of information-sharing platforms that the retailers adopt. The Food Industry Center Working Paper 05-02, 2005. <http://agecon.lib.umn.edu/mn/tr05-02.pdf>



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**Food Safety and Security Issues in Agro-Food Policy and Global Trade** by Jean Kinsey. The imperative to food safety and security is taking on new dimensions with emerging pathogens in plants and animals and terrorist threats. The economic opportunities for expanding markets verses the costs of complying with a variety new public and private safety and security standards provide trade-offs that are complicated by the industrialization of the global food supply chain, including retailing. Investments in modern processing and information technologies are an imperative, if smaller producers and manufacturers are to participate in global trade. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galletto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**The Globalization of Food Systems: A Conceptual Framework and Empirical Patterns** by Benjamin Senauer and Luciano Venturini. This paper discusses agro-food trade flows as well as foreign direct investments in the food industry in an increasingly global food system. While the process has long been dominated largely by international food manufacturers, the emergence of global retailers is a further powerful engine of globalization with far reaching implications for the food system. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galletto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**Information Exchange and Strategic Behavior in Supply Chains: Application to the Food Sector** by Hamid Mohtadi and Jean Kinsey. Information technology (IT) facilitates information exchange between retailers and suppliers. Based on evidence from the food industry, information strategies under uncertainty are analyzed, using game theory. Some key results are as follows: 1) under certain conditions, retailers withhold valuable sales data from suppliers, even if this means less supply coordination; 2) a revealed equilibrium exists where suppliers learn retailers' market data despite retailers' withholding of such data; 3) this leads either to full information convergence, or, surprisingly, incomplete information convergence with some informational asymmetry remaining; and 3) retailers with greater

market power and numerous suppliers are more inclined to share, rather than to withhold, information. *American Journal of Agricultural Economics*, v.87, no.3, August 2005.

**No Green Light to Chow Down** by Ben Senauer. A newly released government study regarding the health risks of overweight and obesity was causing confusion and misinterpretation, which this op-ed paper attempted to clarify. The key finding of the study is still that obesity poses a serious health risk, causing an additional 112,000 deaths annually in the U.S. *Pioneer Press*, May 24, 2005.

**Product Market Competition and Human Resource Practices: An Analysis of the Retail Food Sector** by Elizabeth Davis, Matthew Freedman, Julia Lane, Brian McCall, Nicole Nestoriak, and Timothy Park. The rise of super-centers and the entry of Wal-Mart into food retailing have dramatically altered the competitive environment in the industry. This paper explores the impact of such changes on the labor market practices of traditional food retailers. We use longitudinal data on workers and firms to construct new measures of compensation and employment, and examine how these measures evolve within and across firms in response to changes in product market structure. An additional feature of the analysis is to combine rich case study knowledge about the retail food industry with the new matched employer-employee data from the Census Bureau. University of Minnesota, The Food Industry Center Working Paper 05-03, 2005.

<http://agecon.lib.umn.edu/mn/tr05-03.pdf>

**WIC Food Packages: Time for a Change** by Jean Kinsey, et al. The recommendations of a committee of the Institute of Medicine's Food and Nutrition Board at the National Academy will dramatically improve the food offerings in the health and nutrition program for more than 7.6 million women, infants, and children in the U.S. with a cost neutral amount of \$4.5 billion per year. Currently, about one half of all U.S. infants and one quarter of children aged 1 through 4 years receive Women, Infants, and Children (WIC) benefits. New food packages designed for these recommendations include adding fresh fruits and vegetables, whole grains, and reducing high-caloric fruit juices. More incentives for breast feeding are build in as well. Institute of Medicine of the National Academies, Food and Nutrition Board, Committee to Review the WIC, Washington, DC: National Academies Press, 2005.



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## ***Production and Marketing Economics***

**The Economic Value of Barge Transportation: A Case Study of the Minneapolis Upper Harbor by Jerry Fruin.** Some officials have proposed closing the Minneapolis Upper Harbor to barge traffic so that the Mississippi River area above the St. Anthony Falls can be converted to housing, industry, and recreational use. This study estimates the monetary and public externality costs that would occur, if barges were eliminated above the St. Anthony dams and essential commercial traffic was shifted to truck or rail. The estimated increases in transport costs to Minnesota shippers and customers would exceed \$4 million annually, while public cost increases—due to increased highway maintenance, congestion, and pollution—would exceed \$1 million. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galletto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**Four Articles—“Employee Rosters Rise: Wages on the Upswing”; “Employees, Employers Search for the Right Fit”; “Industry Survey Tracks Employment Trends”; and “Work Environment Tops Employee Priority Lists”—all by Terrance Hurley, James Kliebenstein, Peter Orazem, and Dale Miller.** This series of articles summarizes the latest survey in a series of four surveys that have been conducted over the past 15 years by the National Pork Board, the National Pork Producers Council, and *National Hog Farmer* Magazine. The survey results highlight important trends in employment and employee relations in the U.S. pork industry, as the industry has become more industrialized and more dependent on hired labor. In *Nationwide Survey of Employees and Producers: A 15-Year Summary; a Special Report by National Hog Farmer*. Pfizer Animal Health, 2005.

**FINBIN 2004 Minnesota Farm Financial Update by Dale Nordquist.** The approximately 2,400 Minnesota farms in the FINBIN database represent a broad cross-section of Minnesota production agriculture. While there is no “typical” Minnesota farm, these farms include a large enough sample to provide a good barometer of commercial farming in Minnesota. If any group is over-represented, it is probably the mid-sized family farm, the group that most

experts feel is being squeezed the hardest by competitive economic forces. With this caveat, this paper takes a look at the current financial condition of these farms at the end of 2004, and trends over the nine years for which statewide data is available in FINBIN. Center for Farm Financial Management, 2005. <http://www.cffm.umn.edu/Pubs/2004MinnesotaFarmFinancialUpdate.pdf>

**Industry Survey Tracks Employment Trends by Terrance Hurley, James Kliebenstein, Peter Orazem, and Dale Miller.** Key information gleaned from the survey responses includes average salaries (reported by region and job title), employee benefits, levels of education and experience, employee management and job satisfaction trends. Additionally, the survey tracks ages, types of operations and production levels of owners/employers, as well as the operations the employees represent. In *Nationwide Survey of Employees and Producers: A 15-Year Summary; a Special Report by National Hog Farmer*. Pfizer Animal Health, 2005.

**National Farmers Organization: 50 Years of Building Farmer Market Power by Richard Levins.** The National Farmers Organization (NFO) has evolved from a radical organization that dumped milk and killed pigs to one that administers sophisticated group marketing programs for farmers. NFO’s focus on market power, as opposed to government programs, makes it an interesting alternative in today’s world of globalized farm markets. *Agro Washington*, v.4, no.4, 2005.

**Spatial Yield Risk Across Region, Crop, and Aggregation Method by Michael Popp, Margot Rudstrom, and Patrick Manning.** A researcher interested in crop-yield risk analysis often has to contend with a lack of field- or farm-level data. While spatially aggregated yield data are often readily available from various agencies, aggregation distortions for farm-level analysis may exist. This paper addresses how much aggregation distortion might be expected, and whether findings are robust across wheat, canola, and flax grown in two central Canadian production regions that differ mainly by rainfall, frost-free growing days, and soil type. Using Manitoba Crop Insurance Corporation data from 1980 to 1990, this research, regardless of crop or region analyzed, indicates that 1) spatial patterns in risk are absent; 2) use of aggregate data overwhelmingly under-estimate field-level yield risk; and 3) use of a relative

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risk measure compared to an absolute risk measure leads to slightly less aggregation distortion. Analysts interested in conducting farm-level analysis using aggregate data are offered a range of adjustment factors to adjust for potential bias. *Canadian Journal of Agricultural Economics*, v.53, no.2–3, June/September 2005.

**The Supply Chain for Parmigiano-Reggiano Cheese in the United States by Andrea Berti, Maurizio Canavari, and Robert King.** International supply chains for food products differentiated by their place of origin are highly variable, and are influenced by product characteristics, trade policies, and the business strategies of key chain participants. However, most products that achieve widespread distribution in another country usually reach consumers by “plugging into” standard domestic wholesale and retail channels. This paper 1) describes the channels through which Parmigiano-Reggiano cheese reaches U.S. consumers; 2) develops hypotheses about how the supply chain will change, as U.S. restrictions on Italian cheese imports are relaxed; and 3) assesses the contributions of institutions that make it easier for Italian producers of Parmigiano-Reggiano cheese to signal quality to U.S. consumers and, thus, capture a greater share of revenues from Parmigiano-Reggiano cheese sold in the U.S. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galletto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**Ten Reasons Market Power is Important for Dairy Farmers by Richard Levins.** Only a handful of processors control most of fluid milk and cheese making in the United States. Dairy farmers must market milk in very large volumes to achieve counter-vailing force in the market place. *Hoard's Dairyman*, v.150, no.13, August 10, 2005.

**U.S. Dry-Grind Ethanol Production: Economic Competitiveness in the Face of Emerging Technologies by Vernon Eidman and Douglas Tiffany.** A comparison of published data on lignocellulosic ethanol processing with state-of-the-art dry-mill ethanol plants in the Midwest suggests that lignocellulosic processing will become competitive with the dry-mill process when the price of corn reaches \$3.00 per bushel in the production area. Further improvements in lignocellulosic processing that make lignocellulosic

processing more competitive, may be forthcoming within the coming decade. Corn prices and other factors that affect them will guide the adoption of this alternative to the dry-mill process. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galletto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**Utilizing Federal Crop Insurance: Coverage Alternatives and Marketing Strategies for Managing Grain Yield and Price Risk by Gary Hachfield and Robert Craven.** Producing and marketing grain in today's agricultural and economic environment historically carries with it narrow, uncertain profits as well as yield and price risk. Producers can manage and reduce these risks by utilizing revenue-based federal crop insurance, coupled with a pre-harvest marketing plan. Understanding crop insurance alternatives will enable producers to accomplish this risk-management goal. University of Minnesota Extension Service, 2005. <http://www.cffm.umn.edu/Pubs/federalcropinsurance2005.pdf>

**Welfare Trade-Offs in U.S. Rail Mergers by Marc Ivaldi and Gerard McCullough.** Since the publication by Williamson (1968) of his seminal paper on antitrust, there has been a growing recognition by regulators of the need to assess trade-offs between merger-related efficiency gains and merger-induced increases in market power. This paper addresses that need by presenting a structural econometric model of recent mergers in the U.S. rail industry. The paper extends the structural methodology by evaluating actual (as opposed to simulated) merger effects and by incorporating parametric estimates of 1986 and 2001. We found that despite dramatic industry consolidation, the Williamson trade-offs have favored rail customers. In addition, we found that behavior in these markets is consistent with the Kreps-Scheinkman (1983) model of a two-stage game, where capacities are chosen first and then prices are set to give the Cournot outcome. London, UK: Center for Economic Policy Research, Discussion Paper 5000, 2005.

### *Public and Community Economics*

**Aspects of Small-Firm Research by Alexander Amati and Glenn Pederson.** This paper reviews the research

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literature on small firms versus large firms, in order to identify what special functions small and medium enterprises (SMEs) play in the internationalization process. The process of internationalization is incremental, because SMEs move first into neighboring countries. Thus, distance has a significant impact on both SME export activity and foreign direct investment. The evidence suggests that the reach of small manufacturing firms is limited, but the reach of knowledge-intensive firms is more distant. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galletto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**The Effect of Competition on the Practice of Outpatient Services for Diabetes Patients at Different Levels of Hospitals in Taiwan by Ya-Ming Liu and Jean Kinsey.** This paper empirically analyzes hospital non-price competition in a market characterized by a government accreditation system in Taiwan. Outpatient services provided to diabetes patients were used to measure the quality of patient care in outpatient departments in three types of hospitals. The hypothesis that an increase in the number of highest accredited hospitals would improve the quality of care in other types of hospitals was rejected. However, after carefully controlling endogeneity and measurement error of the hospital competition index by using instrumental variables, empirical findings (based on the National Health Insurance Research Database from 1997–99) show that different types of hospitals may respond to competitive pressure from the various levels of hospitals differently. Positive spillover effects were found from competition from regional to district hospitals. These findings may deserve serious consideration when forming policy to allocate medical resources to different levels of hospitals. *Applied Economics*, v.37, no.12, 2005.

**Minnesota Farm Real-Estate Sales: 1990–2004 by Steven J. Taff.** This publication (<http://agecon.lib.umn.edu/mn/p05-07.pdf>) is a snapshot of the Minnesota Farm Real-Estate Sales Web site (<http://www.apec.umn.edu/faculty/sjtaff/salesstudy>) as of June 2, 2005. Because the farm real-estate sales information is formally reissued every spring as new sales data become available, the 1990–2004 summary consists largely of graphs and tables summarizing sales

over the past 15 years. In addition, the 1990–2004 summary provides averages at the multi-county region and at the statewide levels of aggregation. Please note that individual transaction data are available for downloading and analysis at the Minnesota Land Economics Web site, located at <http://www.apec.umn.edu/landeconomics>.

**Public Acquisition of Property Rights to Serve Agriculture/Conservation Policy: Lessons from Italy and the U.S. by Davide Viaggi and Steven J. Taff.** This paper focuses on public programs that purchase conservation contracts (leases and easements) on agricultural land in Italy and the U.S. These contracts are strongly embedded in the overall Common Agricultural Policy of the European Union and in the agricultural programs of the U.S. Not all the promised gains from these programs, however, have been born out in practice. The movement in both countries is towards: 1) a decentralization of decision power to lower government authorities; 2) measures designed to provide more environmental services; 3) stronger targeting, based on locally defined environmental scores; and 4) longer-term—but not perpetual—contracts. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galletto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**Residential Development Impacts in Two Minnesota Regions by Laura Kalambokidis and Bob Patton.** New homes and new residents often bring to local governments both increased tax revenues and increased government service costs. Whether the development is a contributor to, or a drain upon, the local budget, depends on the development's "net fiscal impact"—the difference between the revenues flowing from the development and the costs of providing services to new residents. This article reports on the net fiscal impact of residential development in two Minnesota regions. The authors conclude that changing the location and density of new residential development within a region changes the impact of the development on local governments' budgets. In addition, development that spans jurisdictions can have differing effects on the budgets of those jurisdictions. *CURA Reporter*, v.35, no.2, spring 2005.



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## ***Resource and Environmental Economics***

**Are Rural Residents Willing to Pay Enough to Improve Drinking Water Quality?** by Yongsung Cho, K. William Easter, Laura McCann, and Frances Homans. The concentrations of iron and sulfate in community water supplies are a concern for a number of areas in southwestern Minnesota. This study used the contingent valuation method to determine how much consumers would be willing to pay to improve their drinking water quality. On average, individuals were willing to pay US \$5.25 per month to reduce the level of iron and US \$4.33 per month to reduce the level of sulfate in their water to the U.S. Environmental Protection Agency's secondary standards for drinking water quality. *Journal of the American Water Resources Association*, v.41, no.3, June 2005.

**Conserving Species in a Working Landscape: Land Use with Biological and Economic Objectives** by Stephen Polasky, Erik Nelson, Paul Fackler, and Anthony Starfield. Habitat loss and fragmentation are major threats to biodiversity. Establishing formal protected areas is one means of conserving habitat, but socio-economic and political constraints limit the amount of land in such status. Addressing conservation issues on lands outside of formally protected areas is also necessary. In this paper we develop a spatially explicit model for analyzing the consequences of alternative land-use patterns on the persistence of various species and on market-oriented economic returns. We find that with thoughtful land-use planning, a large number of conservation objectives can be achieved at little cost to the economic bottom line. *Ecological Applications*, v.15, no.4, 2005.

**Cost Recovery and Water Pricing in Irrigation** by K. William Easter, Yang Liu, and Cesare Dosi. The chapter focuses on ways to improve the collection of water charges and use incentives (prices and markets) to encourage water saving. The authors summarize a set of strategies that have proven successful in different irrigation systems around the world. The chapter concludes with policy recommendations based on successes that have been achieved in systems facing different economic, political, and institutional conditions. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galletto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione

Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**Diversity, Productivity, and Temporal Stability in the Economies of Humans and Nature** by David Tilman, Stephen Polasky, and Clarence Lehman. Recent advances in ecology are of great potential relevance to economists. Here we present two ecological models of mechanisms of competition and coexistence, and use these to derive how the primary productivity of ecosystems, the amount of carbon dioxide removed from the atmosphere and stored by plants, the efficiency of resource use, and the spatial and temporal variability of productivity and resource use should depend on diversity. We then discuss the relevance of these results to ecosystem services and the economic value of diversity, and the functioning of any competitive system—including the economy. *Journal of Environmental Economics and Management*, v.49, no.3, May 2005.

**Ecosystem Goods and Services and Their Limits: The Roles of Biological Diversity and Management Practices** by David Tilman and Stephen Polasky. Humans receive vital goods and services from both managed and natural ecosystems and have become the inadvertent or deliberate managers of essentially all of the terrestrial ecosystems of the world. We consider the forces that influence the flows and the stability of flows of ecosystem goods and services, and the optimization of social welfare that could come from policies that maximize the net value of the flows of these goods and services. In *Scarcity and Growth Revisited: Natural Resources and the Environment in the New Millennium*, edited by R. David Simpson, Michael A. Toman, and Robert U. Ayres. Washington, DC: Resources for the Future, 2005.

**Ecosystems and Human Well-Being: Biodiversity Synthesis—Report of the Millennium Ecosystem Assessment** by Stephen Polasky, et al. The Millennium Ecosystem Assessment was carried out to assess the consequences of ecosystem change for human well-being and to analyze options available to enhance the conservation and sustainable use of ecosystems. This report synthesizes and integrates findings related to biological diversity, and its contribution to ecosystem services and human well-being. Washington, DC: World Resources Institute, 2005.

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**Institutional Arrangements are Critical for Effective Water Markets** by **K. William Easter** and **Rodney Smith**. This chapter tries to determine why the use of water markets has not expanded more rapidly given the growing scarcity of water. They find there are two principal concerns that tend to limit the use of markets. One is the effect water trading might have on regional income, and the other is the possible environmental impacts of water trading. The analysis of the regional effects shows that if income flight doesn't occur, the region selling water to other regions is better off, but the service providers in the region may be worse off. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galleto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**Minnesota's Commercial Alternate Energy Industries: Production, Policies, and Local Economies** by **Brendan Jordan** and **Steven J. Taff**. A confluence of economic and political forces is leading to renewed attention to the potential for Minnesota to increase its share of home-grown energy. Alternative energy industries, the argument goes, should receive public support because they generate a pattern of spending and outputs that are in some sense better than the patterns of traditional energy industries. Is that true? How much potential is there, really? And what would such an increase mean for the state's economy? To properly address these questions, we need an analytic approach that permits us to array dissimilar industries on the same framework, making assumptions and key parameters transparent, so that we can examine cross-industry economic linkages, and conduct forward-looking analysis of these industries. Our framework, at its core, is a set of individual energy-production-industry budgets that track the transformation of feedstocks (such as corn, garbage, and wind) into energy, jobs, and spending. We use these budgets to estimate key outputs for each of the major alternative energy industries in the state. Thus, our analysis focuses on two fuels (ethanol and biodiesel) and four types of alternative electricity generating systems (wood, wind, garbage, and landfill gas). St. Peter, MN: Center for Rural Policy and Development, 2005.

**Natural Resource Abundance and Economic Growth in the Two-Country World** by **Beatriz Gaitan** and **Terry Roe**. We investigate the dynamics of nonrenewable resource abundance on economic growth and welfare in a two-country world. One country is endowed with a nonrenewable resource, otherwise the countries are identical—except, possibly, for their initial endowments of capital. Unlike previous studies analyzing small open economies, we show that once interactions between research-rich and resource-less economies are considered, the effect of the nonrenewable resource on the resource-rich economy's performance can be positive. We derive the necessary condition for the nonrenewable resource to have a positive effect on the growth rate of the country, provided the elasticity of the initial price of the resource—with regard to the initial stock of the resource—is greater than minus one. An analytical solution to the model confirms that this elasticity is greater than minus one, and numerical simulations with a very large range of parameter values confirms the same. University of Minnesota, Economic Development Center Bulletin 05-1, 2005.

<http://agecon.lib.umn.edu/mn/edb05-01.pdf>

**Point-NonPoint Source Water-Quality Trading: A Case Study in the Minnesota River Basin** by **Feng Fang**, **K. William Easter**, and **Patrick Brezonik**. Contrary to the general trend of only a few actual trades occurring within point-nonpoint source water-quality trading programs in the United States, two trading projects in the Minnesota River Basin, created under the provisions of National Pollutant Discharge Elimination System (NPDES) permits, have generated five major trades and numerous smaller ones. In this paper, these two projects are described to illustrate their origins, implementation, and results. *Journal of the American Water Resources Association*, v.41, no.3, June 2005.

**Reform of Irrigation Management and Investment Policy in African Development** by **K. William Easter** and **Slim Zekri**. This paper examines the reform of water and irrigation management in Africa and compares it with similar reforms in Asia. Several things are evident from the review. First, Sub-Saharan Africa (SSA) is at an earlier stage of irrigation development and reform than Asia. Second, the articulated need for reform is much stronger in Asia than it is in SSA. Third, the productivity of small-scale irrigated farms is significantly lower in SSA compared to



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Asia. Thus any irrigation investment strategy in SSA should be different from Asia and focus on increasing small-farm productivity as well as small-scale irrigation projects. Finally, all direct government irrigation investments should be done jointly with decisions regarding the type of project management. *South African Journal of Economic and Management Sciences*, v.7, no.4, December 2004.

**Strategies to Conserve Biodiversity by Stephen Polasky.** For many biologists the loss of biodiversity is perhaps the single most important environmental issue at the beginning of the 21st century. Threats to biodiversity arise from a wide range of human actions including habitat conversion, introduction of invasive species, pollution, over-harvesting, and climate change. Conserving biodiversity will require reducing these threats. This chapter investigates cost-effective strategies to reduce threats to biodiversity. IN *The International Yearbook of Environmental and Resource Economics*, 2005/2006: A Survey of Current Issues, edited by Henk Folmer and Tom Tietenberg. Northampton, MA: Edward Elgar, 2005.

**Transaction-Cost Measurement for Evaluating Environmental Policies by Laura McCann, Bonnie Colby, K. William Easter, Alexander Kasterine, and K.V. Kuperan.** Policy choice and policy design need to take account of transaction costs in order to increase the efficiency and sustainability of policies. However, transaction costs must first be measured to be included in the evaluation of alternative environmental or natural resource policies. While a number of studies measure transaction costs, there has been no systematic treatment of the fundamental issues involved. This article examines the issues involved in transaction-cost measurement and makes recommendations regarding a typology of cost as well as the measurement methodologies themselves. In particular, methods used for the nonmarket valuation of environmental goods may have potential for measuring transaction costs. *Ecological Economics*, v.52, no.4, March 2005.

### ***Trade and Development Economics***

**Agricultural Policy in an Increasingly Integrated International Economy by G. Edward Schuh.** Globalization has caused national economies to become more open to forces from the international economy. That in turn causes national economic policy to be less and less effective. This

paper discusses the reforms needed at the international, national, state, and local policy levels in light of this transformational change. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galletto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**Agriculture and Economy-Wide Growth: Investigation in a Ramsey Framework by Xavier Irz and Terry Roe.** A two-sector Ramsey-type model of growth is developed to investigate the relationship between agricultural productivity and economy-wide growth. In a closed-economy framework, the transitional dynamics of the model establish theoretically that, when preferences respect Engel's law, the level and growth rate of agricultural productivity influence the speed of capital accumulation. Further, a calibration exercise shows that a small difference in agricultural productivity has drastic implications for the rate and pattern of growth of the economy. Hence, low agricultural productivity can form a bottleneck limiting growth, because high food prices result in a low saving rate. The paper also develops a framework to analyze the same relationship in the case of an economy open to international trade. We establish that, in the long run, openness to trade increases the sustainability as well as the growth rate of the economy—and, hence, may offer a means of bypassing the previously mentioned bottleneck created by low agricultural productivity. Invited paper prepared for the IFPRI/Cornell Conference on Threshold Effects and Non-Linearities in Growth and Development, Washington, DC, 2005.

**Capital Accumulation and Economic Growth: The Case of the Retail Food Industry in Developing Countries by Terry Roe.** Globalization has led in many developing countries to adjustments that are occurring within half the time the same kind of adjustments occurred in U.S. agriculture. These adjustments are most obvious in the food-retail sector, with unfortunate negative consequences for those least able to adjust. Growth in real household income in metropolitan areas, an increase in gender equity in labor markets, access to transportation and refrigeration (along with digital technology to manage the quality, variety, and flow of food), has caused rapid growth in many of the low- and middle-income countries in the market share of the retail food dollar captured by modern supermarkets such

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as WalMart. The larger commercial farmers in these countries are the main contributors to this success. The smaller subsistence farmers with a relatively large family in comparison to land holdings, cannot produce the quality of grains, fruits, poultry, and livestock that meet the modern marketing requirements of supermarkets. Consequently, retail food prices in the traditional food outlets serviced by the smaller farmers have declined. The lack of a safety net, poor land tenure arrangements, low levels of education, and the lack of cooperatives and other organization forms to better coordinate marketing activities, leave few alternative opportunities to support these rural families. For them, economic growth and globalization is not the happy outcome experienced by others. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galleto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.

**Economy-Wide Gains from Decentralized Water Allocation in a Spatially Heterogeneous Agricultural Economy by Xinshen Diao, Terry Roe, and Rachid Doukkali.** This paper considers the allocation of water in a spatially heterogeneous irrigated agriculture, and evaluates the economy-wide benefits from establishing property rights to water that private agents may then rent in/out to others. A detailed economy-wide model of the Moroccan economy is developed, with major attention given to seven irrigated regions whose water supplies and distribution are managed by seven water authorities. *Environment and Development Economics*, v.10, part 3, June 2005.

**Is War Necessary for Economic Growth? Military Procurement and Technology Development by Vernon Ruttan.** Military and defense-related procurement has been an important source of technology development across a broad spectrum of industries that account for an important share of U.S. industrial production. In this book, the author focuses on six general-purpose technologies; 1) interchangeable parts and mass production, 2) military and commercial aircraft, 3) nuclear energy and electric power, 4) computers and semiconductors, 5) the Internet, and 6) the space industries. In each of these industries, technology development would have occurred more slowly, and in some cases, much more slowly or not at all, in the absence of military and defense-related procurement. Oxford Press Dec. 2005.

**Productivity Growth in World Agriculture: Sources and Constraints by Vernon Ruttan.** I anticipate that in those countries and regions in which land and labor productivity are already approaching scientific and technical frontiers, it will be difficult to achieve growth in agricultural productivity comparable to the rates that occurred over the last half century. For those countries in which land and labor productiveness are furthest from the frontier levels, particularly in sub-Saharan Africa, acquisition of greater scientific and technical capacity will open up substantial opportunities to enhance the rate of growth in agricultural productivity. During the next half century, I anticipate that the problem of pest and pathogen control will become the most serious constraint on sustainable growth in agricultural production. In *The Economics of Sustainable Development*, edited by Sisay Asefa, Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2005.

**Sustainability and Enclosure: Land, Intellectual Property, and Biotechnology by C. Ford Runge and Edi Defrancesco.** The global debate over intellectual property rights (IPR) relating to genetic information and biotechnology, has divided developed and developing countries. A fundamental issue undergirds these complexities. Who is to be excluded from various kinds of information, defining life itself? And who is to be included in the benefits of these ideas? Insight into these issues may be gained from the history and theory of property rights in land—especially the enclosure of lands held in common. After considering successful examples of common property, the paper considers the modern version of the debate over intellectual property in plant genomics. In *Food, Agriculture, and the Environment: Economic Issues*, edited by Edi Defrancesco, Luigi Galleto and Mara Thiene. Milano, Italy: Universita di Padova, Dipartimento Territorio e Sistemi Agro-forestali; Fondazione Cassa di Risparmio di Padova e Rovigo; FrancoAngeli, 2005.



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## **Third Annual Development Conference**

The Center for International Food and Agricultural Policy is sponsoring the 3rd Minnesota International Economic Development Conference to be held April 28 and 29, 2006 at the McNamara Alumni Center.

Thirty papers will be presented in ten separate sessions: transition economics, trade and growth models, fertility and marriage, discrimination and labor markets, poverty, Vietnam, education, trade and international financial flows, child labor and intrahousehold allocation, child nutrition and education. The guest speaker is Dani Rodrik, Professor of International Political Economy at the Kennedy School of Government, Harvard University. He will present, "Export Composition and Economic Development."

Registration fee (includes 5 meals) is \$20 for graduate students and \$75 for all others. The deadline for registration is April 7. For more information, see the conference web site at:

<http://www.apec.umn.edu/faculty/pglewwe/Minncnf/>