

### DEPARTMENT OF AGRICULTURAL AND APPLIED ECONOMICS

### **Faculty Profile: Steve Smutko**

By Steve Smutko, Professor and Spicer Chair of Collaborative Practice

After nearly 30 years in the southeast US, I am finally back to a

place where I can relate to my surroundings. I am not suited for a hot, humid, urbanized environment, and I am happy to be in a place where I can see the horizon. Since my arrival at the University of Wyoming from North Carolina in the winter of 2010, I have become reacquainted with resource use and allocation issues that have a strong western flavor: energy development, charismatic megafauna, and public land management.



I was hired at the University of Wyoming to fill a new position: the Spicer Chair in Collaborative Practice in the

Haub School of Environment and Natural Resources. I am also a professor in the Department of Agricultural and Applied Economics. Beverly Spicer of Rock Springs endowed the ENR program in memory of her husband, Eldon "Spice" Spicer, who advocated for stakeholder involvement and consensus building to resolve land use issues. I aim to follow Spice's worthy example by developing a program in collaborative decision making here at UW.

I grew up on the Colorado front range and received a BS degree from Colorado State. I received a master's in Community and Regional Planning from North Dakota State and worked as a community planner in Montana before returning to school for a PhD in economics from Auburn University. My area of specialization has always been in environment and natural resources. Before coming to Wyoming I was an Extension Policy Specialist at North Carolina State University for 16 years. Here, at the University of Wyoming, I have a split appointment in teaching, extension, and research.

I have worked with local governments, state and federal agencies, nonprofits, business leaders and others for nearly two decades to help them make informed and efficient decisions on natural resources management and environmental policy issues. I am a "pracademic" in the sense that I practice what I teach. My work is focused primarily around designing, leading, and evaluating collaborative decision processes in a technically complex and contentious policy environment. My work is based firmly in economic theory: I help people make Pareto-optimal moves in a negotiation framework with the objective of maximizing joint gains. I apply the lessons I learn from working with people and communities in resolving tough public problems back to the classroom and in my research. I teach a graduate level course in negotiation analysis and an undergraduate course in approaches to natural resources problem solving.

I have a strong interest in off-campus education and training in collaborative processes, negotiation, and group problem solving, and offer training workshops in those areas. Through the Ruckel-shaus Institute of Environment and Natural Resources I have developed the Summer Workshop Series in Natural Resources Decision Making. I will be teaching seven workshops around the state this summer designed for natural resource managers and planners, local government officials, foresters, conservationists, environmental consultants, attorneys, students, and anyone who works in natural resources management and environmental policy. I am really excited to be in Wyoming and look forward to working with my colleagues here in the Department of Agricultural and Applied Economics on issues important to Wyoming citizens.

## Graduate Program Update: Description of 2<sup>nd</sup> year Thesis Projects

### Abby Mellinger: Assessment of the economic efficiency of mitigating impacts to wildlife from energy development in Sublette County, Wyoming

In response to the level of development in the Jonah Infill Drilling Project Area and Pinedale Anticline Project Area in Sublette County, Wyoming, federal and state agencies have launched efforts to mitigate the impacts of energy development on wildlife. One such mitigation tool is the purchase of conservation easements on private lands to protect mule deer habitat. I examine these conservation easements using a spatial model with parcel-specific characteristics that determines the location of easements to maximize wildlife conservation objectives for given levels of economic returns to land in non-conservation uses. My results will highlight existing purchases that are economically and ecologically efficient, and thus will inform future purchases.

### Alex Gorski: An Economic Analysis of an Overall Carbon Capture and Storage System for the Jim Bridger Power Plant in Rock Springs, Wyoming

This research analyzes the economic viability of alternative process-

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### **Research Prospectus Presentations**

Early this spring the new entrants into the department's MS program presented their academic project ideas. Each talk was 15 minutes with 10 minutes of question and answer. Below is a list of the presented projects.

Muhammad Al Amin: Alternate Agricultural Land Use in the Canadian Prairies: Climate Risk and Conservation of Wetland Habitats

Jenna Bagnall: The Economic and Ecoefficient Comparison of Reduced-input, Organic, and Conventional Farming Methods in Southwest Wyoming.

Kari Boroff: Cost Effectiveness of Elk Management in Controlling Brucellosis Transmission to Cattle

Peter Burgess: The Market for Produced Water in the Powder River Basin

Tucker Hamilton: Climate Change and Variation: Indirect Effects, Direct Effects, and Management Implications for Cattle Production in Eastern Wyoming

Jane Kapkiyai: Economic Analysis of Carbon Sequestration and Energy Efficiency in Dry-land Production Systems

Andrew Hodges: Least Cost Alternative to Increase Water Supply in an Arid Region

Shane Ruff: Estimating the Feasibility and Transition Costs of Switching from a Cow-Calf Operation to a Stocker Operation in Northwest Wyoming

Anna Scofield: Determining the Relationship Between Residential Development and Wildfire Suppression Costs in the Rocky Mountains.

Susan Wells: Variability in Economic Welfare of Water Due to Climate Change in the North Platte River Basin

### Wyoming Master Woolgrower Program Created

The University of Wyoming Extension Profitable and Sustainable Agricultural Systems initiative team just completed offerings of the Wyoming Master Woolgrow-

er program in two locations of the state. The objective of the project is to



promote the sustainability of Wyoming woolgrowers through use of a comprehensive production strategy and risk assessment program. Participants receive training on goal setting, financial records and analysis, insurance options, risk management strategies and enterprise analysis. The five-session course also covers marketing, innovative herd management strategies and hands-on training using risk assessment tools in each of the four-hour workshops. The Master Woolgrower program was developed using the template of the national award-winning Wyoming Master Cattleman program.

Sponsors for the Wyoming Master Woolgrower program include: the University of Wyoming Extension Profitable

and Sustainable Agricultural Systems initiative team, the Western Center for Risk Management Education and the Risk Management Agency.



# Book Corner

Tom Foulke

**Title**: *A Grand Pursuit: The Story of Economic Genius* **Author**: Sylvia Nasar (2011)

Published by: Simon & Schuster In A Grand Pursuit: The Story of Economic Genius, Sylvia Nasar (author of A Beautiful Mind) explores the development of economic ideas from the early 19<sup>th</sup> century to the late 20<sup>th</sup> century, and how they have shaped the global economic landscape. This is not a complete history of economic thought. It is more like an exploration of some of the "geniuses" behind the "big ideas" that have had so much influence over the past two centuries. Nor are these complete biog-



raphies; they are more akin an intellectual family tree than anything. Adam Smith is only briefly mentioned.

The book starts with David Ricardo and his concepts of competitive and comparative advantage. It then moves onto John Stuart Mill and the abolition of the English Corn Laws in the mid-19<sup>th</sup> century. I found this section fascinating. Most of us are unaware of the ramifications of the decades long struggle to abolish these laws has had on agricultural trade as well as productivity.

Ms. Nasar spends a considerable amount of time on Marx, but does not paint him with a favorable brush. She mentions several times how Marx lived most of his life in comparative ease as the beneficiary of a capitalist (would be socialist—Engels) in the heart of the greatest capitalist empire (London), expounding on the virtues of the proletariat, without ever setting foot in a factory.

As with any book on economic thought worth its salt, she devotes ample space to John Maynard Keynes. Keynes certainly deserves the title of genius, but frankly I found his arrogance and other quirks of personality off-putting. The same was true of Schumpeter. Those genius economists can be queer ducks, but there is little room for argument about their impact on society.

For my money, I thought the really interesting bits of the book stopped with Keynes and Hayek. The later 20<sup>th</sup> century geniuses she described, Joan Robinson and Indian Nobel prize winner, Amartya Sen did not seem to be worthy, given their professional accomplishments, to walk in the footsteps of Keynes and Hayek. I questioned the reasoning for their inclusion in the book.

The book is not for everybody, but you do not need to be an economist to read and enjoy it. Anyone who is interested in the how and why of today's economy would be interested and might learn a thing or two from *A Grand Pursuit*. I did. Recommended for your library by Tom Foulke. ■

Tom is a senior research scientist in the Department of Agricultural & Applied Economics.





# New "Livestock Business Management" option available to incoming Agricultural Business students

### By Dannele Peck

Undergraduate students in the Department of Agricultural and Applied Economics have historically chosen between three specialized options within the BS program in Agricultural Business: "Agribusiness Management," "Farm and Ranch Management," or "International Agriculture." In fall 2012, a fourth option will be available: "Livestock Business Management."

Livestock are typically born on farms and ranches, but many other sectors contribute to the production of beef, including input suppliers, feedlot companies, abattoirs, packing plants, marketing firms, retailers, and market analysts. A wide variety of jobs exist in the livestock industry; however, to successfully compete for these jobs, students must be knowledgeable of both the biology *and* business of livestock production.

The new option in "Livestock Business Management" through the Department of Agricultural and Applied Economics provides students with a well-balanced set of skills in both areas. Students take roughly 24 credit hours of upper-division coursework in Agricultural Business (for example in farm/ranch management, futures and commodities, international trade, agricultural finance, marketing, etc.), and 24 credits of upper-division coursework in livestock production (for example in animal biology, reproduction, nutrition, genetics, grazing management, meat science, *etc.*). Students who complete a particular set of livestock production courses can earn an Animal Science minor. Alternatively, students can substitute roughly 12 credits of rangeland and watershed management courses for certain animal science and biology courses. Although this alternative will not necessarily lead to a minor, it will enable students to tailor their production-related coursework to a particular sector of the livestock industry or to special career goals.

The purpose in developing this new option is to prepare Agricultural business students for a broader set of jobs across the livestock industry, including but not limited to the farm/ranch sector. By providing students with knowledge in both agricultural business *and* livestock biology (in addition to general communication and analytical skills), we believe they will have more diverse employment opportunities upon graduation, and greater flexibility and promotion potential during their careers.

For more information about the new "Livestock Business Management" option within the Department of Agricultural and Applied Economics, contact Dr. Chris Bastian (bastian@uwyo.edu; (307) 766-4377) or Dr. Dannele Peck (dpeck@uwyo.edu; (307) 766-6412). ■

## Cradle Call: Additions to AgEcon



To Kristi Hansen and Tyrrell McAllister, twins Tristan David (right: 6 lbs. 1 oz., 19 inches) and Owen Neil (5 lbs. 11 oz., 19.5 inches) McAllister.

Born March 29, 2012.

To John Ritten and Chain Jones-Ritten, daughter Ember Josephine. Born November 23, 2011. 6 lbs 1 oz., 19 1/2 inches.



To Janet Marsh, granddaughter Coltyn Rae. Born December 30, 2011.

6 lbs. 12 oz., 19 inches.



### Training in Collaborative Natural Resource Decision Making Registration is now open for the Ruckelshaus Institute of Environment and Natural Resources 2012 Summer

Workshop Series

June 22 Intro to Collaborative Natural Resource Decision Making (Jackson, WY) June 26-27 Basic Negotiation Skills for Natural Resource Professionals (Jackson, WY) June 28-29 Advanced Negotiation Skills for Natural Resource Professionals (Jackson, WY) July 30-31 Strategic Communications in Natural Resource Management (Casper, WY) August 1-2 Essentials in Facilitating Controversial Natural Resource Issues (Jackson, WY) August 8-9 Structured Decision-Making Methods for Management and Policy (Laramie, WY) August 14 Intro to Collaborative Natural Resource Decision Making (Cody, WY)

To view the complete schedule and register visit the Ruckelshaus Institute at <u>http://www.uwyo.edu/enr/</u>ruckelshaus-institute/events-trainings/summer-workshop-series/index.html.

If you have questions you may contact workshop organizer Steve Smutko, UW's Spicer Chair in Collaborative Practice, at <u>steve.smutko@uwyo.edu</u> or (307) 766-2703. ■



*In the Margins*—the semiannual newsletter of the Department of Agricultural and Applied Economics at the University of Wyoming

In the Margins

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es for sequestering carbon at existing coal-fired power plants. Specifically, I estimate per tonne CO2 sequestration costs for geological sequestration relative to Dr. KJ Reddy's patented SequesTech carbon mineralization process. Results indicate that the SequesTech process has the potential to significantly reduce carbon capture costs, with costs of \$6-\$7 per tonne compared to approximately \$91 per tonne for geological sequestration.

#### Moses Obbo Owori: Assessment of Baseline Socio-economic conditions of Smallholder Farmers in Eastern Uganda and Western Kenva

My thesis examines the social and economic context in which smallholder farmers in eastern Uganda and western Kenya operate. I use a household survey to understand demographic characteristics, farming practices, patterns of social relations, ownership of land and other production inputs, and access to markets and banking services. I also conduct statistical analyses to understand how these factors interact with each other to influence smallholder farmers' crop production decisions. My results will inform efforts by an interdisciplinary research team at UW to develop new tillage and crop rotation techniques that will improve soil quality and stabilize crop yields in East Africa.

### Jordan Steele: Wolf Reintroduction: Direct and Indirect Effects for Western Wyoming Cattle Producers

The growth of wolf populations in the Rocky Mountain region has increased conflicts between livestock production and wildlife popu-

lations; however, few studies have analyzed the comprehensive effects of wolves on live-

UNIVERSITY OF WYOMING rotations including sugar beets are less risky than those without Agricultural and Applied Economics

stock production. I analyze the direct (i.e., killed and injured calves) and indirect (i.e., effects on weaning weights, conception rates, and stress related illness) economic effects of wolves on a representative cow-calf ranch. Results confirm that wolves can significantly affect ranch profitability, and highlight the importance of indirect wolf effects, which currently are not incorporated into predator compensation policies.

### Wenxing Song: Financial Returns to U.S. Agricultural Research: A **Time Series Analysis**

I examine the relationship between public investments in agricultural R&D in the US, and the productivity-enhancing benefits they produce. I approach the problem from an aggregate perspective, using national data on multifactor productivity and public investments in R&D. The analysis includes a thorough investigation of the time series properties of the data, as well as time series econometric modeling. Though I use novel econometric techniques, my results are consistent with other published studies. I estimate that the real rate-of-return to public agricultural R&D expenditures in the US is between 9 and 10 percent.

#### Brian Lee: Farm Level Impacts of Regulations on Genetically Modified Sugar Beets in SE Wyoming

This study examines the impacts of potential government regulations of genetically modified (GM) sugar beets on producers in Southeast Wyoming. I compare profitability for conventional and GM (Roundup Ready) sugar beets on a per-acre basis using Monte Carlo Simulation. My analysis also includes a whole-farm linear programming model, which allows for substitution to alternative crops. Results indicate that GM sugar beets are more profitable

than conventional sugar beets by \$83.13 per acre, and that crop sugar beets.