

## Profile: Dale Menkhaus

In this edition of the *In the Margins* Faculty Profile we interview Professor Dale Menkhaus as he looks back on what will be 40 years (in October) of research and teaching in UW's Agricultural and Applied Economics Department. After a very productive career, Dale will be retiring in October 2013. ~*The editor.*

### ItM: How would you describe the work that you do?

DM: Let me start from the beginning. This position couldn't have been written any better. It was described as livestock marketing and price analysis, and that's where I started. It was mostly in the livestock marketing area, price analysis area, demand work, particularly meat and meat demand. And it evolved into using laboratory type methods.

The evolution began with the Wyoming Lean Beef project in 1985. We went into that kicking and screaming, but it turned out to be a career changer for me because we ended up doing a laboratory test market. We had to use laboratory analyses because we couldn't find a grocery store that would accept our branded low fat product. We tagged onto a study that was being done at Texas A&M about changing what was then called Good Grade beef into what later became Select Grade.

Our approach started a whole series of experimental economics work in the laboratory. We teamed up with Owen Phillips in UW's College of Business in the Economics and Finance Department in the 1990s and started laboratory market studies, which then led to incorporating some of the work into the classroom. This led to my Fulbright scholarship and work in Russia, which was extremely interesting and exciting as well.

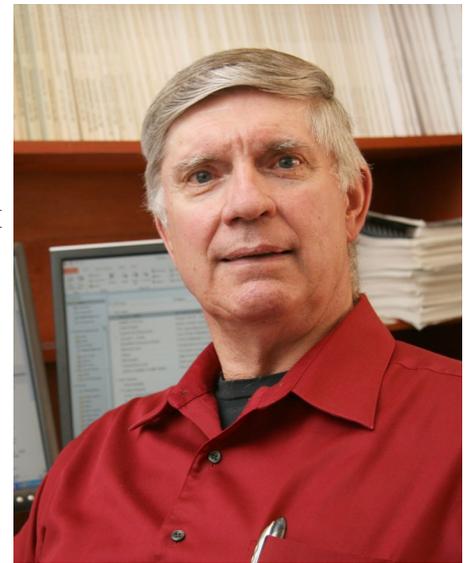
Recently we did some cooperative work with the USDA's Economic Research Service looking at alternative policies to see what the market impacts might be if they had been in force. Chris Bastian and I were involved with that. Mariah Ehmke was involved too, as well as Owen Phillips. So, some of the recent work brought our methods into policy analysis. Now we are looking at the impacts of potential energy policies on energy markets. It uses an experimental economics framework. But it all evolved from the Wyoming Lean Beef project that used laboratory methods.

### ItM: How did you get into agricultural economics?

DM: I was raised on a small farm in south-eastern Indiana, and Dad always said education was important. But I didn't realize that he was telling me that he really meant high school education, because neither Mom nor Dad had a high school education. When I graduated from high school, he posed a deal. He said, "Why don't you stay here on the farm, we'll expand the farm, and you can get a job at the factory in town and farm at night." That didn't sound really ap-

pealing to me. So I said, "No, I'm going to college." And he said, "Well that's fine, you're on your own then." I said that was fine as well, and I started off in engineering at Purdue. Early on, I had a big ole slide rule strapped to my belt, carrying my graphic board to class, and they told me to write my name. Well, I thought, that's not so difficult, I can write my name. This was in the Engineering Graphics class. Well, I got the paper back, and I'd flunked it. I thought, this is not for me.

So I crossed State Street to the Ag campus, because it was something I knew and I would feel comfortable with. I looked at the catalogues, and Ag Economics and Ag Business were appealing. I ended up getting a degree in Ag Business at Purdue, then went to Michigan State for a Master's degree, and then returned to Purdue for a PhD.



During my graduate programs I'd go home and Dad would have two questions. The first question was, "When are you going to get your hair cut?" The second question was, "When are you going to get out of school and get a job?" I told him, "Well, Dad, you know that they are paying me to go to school, so I am going to go as long as I can." And so finally I graduated and the opportunity at UW came up, and thank goodness, Andy Vanvig saw something in me and hired me. So, that was my start here in October of 1973.

The department head at Purdue at the time was Charlie French. He and his wife came to see me and my wife in married student housing. We had just had our first son, and Dr. French came and said, "This is the job for you". He said, "I think you would like it very much." I don't know why he said it, maybe he didn't think I could get a job in the Big Ten schools! But on the other hand, I think he read me well. That was a career changer as well. And I think that having the opportunity to work with some really good students over the years, and colleagues in this department has been very rewarding.

**ItM: What are a couple of changes you've seen over the 40 years you've been in the department?**

## Productivity Analysis in Agriculture

By Matt Andersen

Productivity analysis has a lengthy history in economics dating back to the 1930s when discussions took place between academics and government economists on how to measure inputs and outputs in the economy for the purpose of constructing a measure of economic efficiency (Griliches 1996). Robert Solow (1957) defined the productivity growth residual as a measure of the growth in aggregate output minus the growth in aggregate input each period. Agricultural productivity growth is important to insure that we have an adequate supply of food to feed an expanding global population in the coming decades. Agricultural productivity growth also lowers food costs for consumers and creates profits for agricultural producers.

Early on, economists believed that increases in productivity were mostly a byproduct of an expanding population, but more contemporary research has pointed to a specific cause as the primary driving force behind long run productivity growth; namely, it is public and private investments in agricultural research and development (R&D) that are the source of innovation in agriculture and increases in productivity over time. The process that governs the relationship between R&D expendi-

tures and the productivity-enhancing benefits they generate is complex, usually involving long time lags between the investments and resulting benefits. The lags are sometimes decades long.

In the period 1949-2007, the annual average growth in outputs in U.S. agriculture was 1.67 percent per year while inputs declined at a rate of 0.11 percent per year. This translates to an average productivity growth of 1.78 percent per year, and the remarkable fact that all of the growth in output was entirely attributable to productivity growth as traditional inputs like land and labor actually declined. This also indicates that future increases in agricultural output will probably be entirely dependent on increases in productivity rather than increases in traditional inputs. Where will those productivity increases come from? They will come from investments in agricultural R&D. ■

### References

- Griliches, Z. 1996. The discovery of the residual: a historical note. *Journal of Economic Literature* 34(3): 1324-1330.
- Solow, R.M. 1957. Technical change and the aggregate production function. *The Review of Economics and Statistics* 39(3): 312-320.

## Book Corner

**Title:** *The Quest: Energy, Security, and the Remaking of the Modern World*

**Author:** Daniel Yergin (2011)

**Published by:** The Penguin Press, New York.

*The Quest* is the latest tome (717 pages) from energy guru Daniel Yergin. I don't think it is an understatement to say that if you are interested the importance of energy to today's society, it is required reading. Yergin is also the Pulitzer Prize winning author of *The Commanding Heights* and *The Prize*. He doesn't disappoint with *The Quest*.

The first half of the book is really a continuation of the *The Prize*. The author brings you up to speed with the world's oil and gas system, supply, demand and the gyrations of the global energy system from the mid-1980s to 2011. From there, he moves into the emerging influence of China and the effect that it is having on the world. This is followed by electricity and how different fuels are vying for the

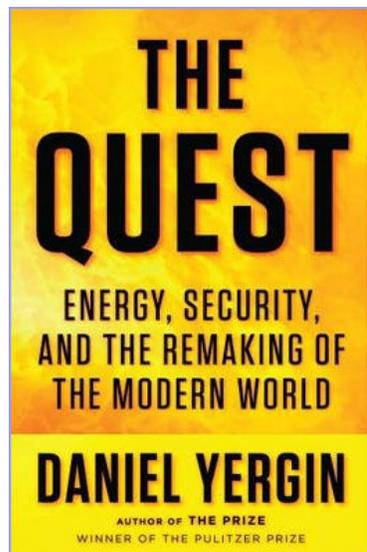
role of primary power source for the growing electrical requirements of the twenty-first century.

The next hundred pages are an excellent overview of the history of climate science. The author does an exceptional job of drawing the lines through time to show how we arrived at our current view of climate change. One thing that struck me was the way that the issue became a political issue and somewhat of a crusade for some of the scientists rather early on. I had not expected that.

The last two hundred pages cover the rest of the energy landscape, primarily the story of renewables—wind, solar and bio-fuels. This may be an important area, but I think it is a less interesting story and the author drifts off a bit as he tries to cover the energy issue water front. To be fair, that is his purpose, to give the reader an all-encompassing overview of today's energy challenges, but it becomes more of a litany of issues after awhile, with less depth than earlier sections.

Large as the book is, the author's style of writing is fluid enough to engage you, even in some pretty dry areas. He has a habit of including factoids and embedding the story in history which will keep you from nodding off. I think it is the connectivity of people and events which I appreciated the most. The use of sub-headings is also helpful for breaking up the material into manageable bits.

Highly recommended for your library by Tom Foulke. ■



# New Work: Price Impacts of Captive Supplies

Currently there is a concern that an increase in captive supplies (inventory, such as fed cattle, that does not move into the cash market because of deals made directly between feedlots and packers) can result in lower cash market prices for livestock. Current research suggests there can be a small, but negative impact on average cash prices. However, most research has not looked at the difference in prices for players in the market who are able to engage in captive supply contracts versus those that don't. Unfortunately, this can't be confirmed with market data because most contracts are privately negotiated. So Chris Bastian, Dale Menkhaus and Darlington Sabasi turned to laboratory market experiments. Their aim, as the subject of Sabasi's master's thesis, was to see whether captive supplies resulted in different prices for livestock purchased by or from players dealing with captive supplies versus those not able to make captive supply deals.

In the experiment they set up, participants sat at a computer and played the role of sellers (producers) and buyers. Sellers made production decisions, then buyers and sellers negotiated prices over the course of several bargaining rounds. The researchers tested four levels of captive supply, represented by a matching of varying proportions of sellers and buyers (none, 25%, 50% and 75%). Their results illustrate that those who do not engage in contracting, i.e., captive supplies, are at a bargaining disadvantage. In the figure, in which 75% of the market players used captive supplies, those sellers only able to trade in the cash market received lower prices (as measured in generalized "tokens" rather than dollars) than those who negotiated captive supply contracts. Alternatively, buyers who did not have access to captive supplies had to pay higher prices than those with access.

Their results found average market prices were not significantly impacted by captive supplies. The Department of Justice generally uses efficiency as a primary criterion when considering antitrust issues, as when enforcing the Packers and Stockyards Act.

The authors conclude that if economic efficiency is the benchmark for legal or policy remedies, then regulating captive supplies will be difficult for producer groups to accomplish. This is because their results suggest that buyers and sellers who do not participate in captive supply contracts are at a bargaining disadvantage rather than being impacted by efficiency loss from market power. Perhaps the appropriate legal or policy questions should center on whether unfair practices exist related to which agents are allowed to engage in captive supply practices. This re-

## Prices Resulting From 75% of Market Agents Using Captive Supplies



search will be appearing this year in the *American Journal of Agricultural Economics*. The article is authored by Darlington Sabasi, Chris Bastian (bastian@uwyo.edu), Dale Menkhaus (menkhaus@uwyo.edu), and Owen Phillips. ■

## Recent MS Thesis Presentations

### Muhammad Al Amin

Agricultural Land Use in a Changing Climate: Implications for Waterfowl Habitat in Prairie Canada

### Andrew Hodges

The Economics of Bulk Water Transport in Southern California

### Phung (Betty) Tran

A Dual Economic Analysis of Capital Utilization and Productivity Growth in U.S. Agriculture

### Moses Obbo Owor

Conservation Agriculture in Eastern Uganda and Western Kenya: Assessment of Beneficiaries' Baseline Socio-economic Conditions



# *In the Margins*

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DM: My first day here on campus I had my suit and tie on, which was the attire at Purdue. I was the only one that had a suit and tie on, so I went home at noon and changed into something more comfortable. While Gordon Kearn and I were walking out the front door (our offices at the time were on the first floor), Gordon told me there's two things you need to do. "One," he said, "You need to get a publication out of your dissertation." Fair enough. "The second thing you need to do is join the bowling team." Why would I want to join the bowling team, I asked. He said, "So people across campus can know who you are, in terms of tenure and promotion". So it wasn't so much about journal articles, as it was about knowing folks across campus and getting acquainted.

The first day here, the dean (Dean Hilston at the time) came to my office and said, "We are going to coffee." And within two weeks I knew everybody in the college. I knew everyone, pretty much as a result of having a common coffee room.

So the expectations were different. At the time, there wasn't so much emphasis on journal articles to get tenure and promotion.

There wasn't as much emphasis on outside money or grants. I recall I wanted to do a survey, and so I asked Dr. Vanvig about some money to do it, and within a couple of days he said: here's the money, do it. So those kinds of things were a bit different.

I've had some terrific mentors: Gordon Kearn, Jim St. Clair, Andrew Vanvig. In some respects I learned more from them than I did during my college career.

**ItM: You've seen both grad students in our Master's program and undergraduate students at all levels. What makes a good student?**

DM: In my 1020 microeconomics class I define a student because I wonder if they know what a student is. I write up on the board "student: one who studies." Some of the results that I get on tests make me wonder if in fact they study. So "one who studies" is what makes a good student.

But more than that, I think it is to have a passion for learning. Learning is hard work. We need to be honest about that when we talk to students. Of course the teacher is a facilitator in that learning experience. To be good teacher, you have to first be a good student: you have to continually learn to be a good teacher. It's a continuous process. Our aim is to give students the foundation to continue to learn.

**ItM: Looking forward to after October, what are the next few years going to look like?**

DM: I'd be remiss if I didn't point out that my wife Linda has been very supportive all these years: taking care of things on the home front. So time at home is going to be a priority. We've got a lot of work to do on the house and our grandkids now are scattered, with two in Rapid City and four near Charlotte, North Carolina. So I hope we can spend more time with them. I hope I can spend more time fishing, and I'd like to spend time with my nephews in Indiana. I'd spend a little longer at coffee also.

Finally, I want to express my deep thanks to the hundreds of students, who have instilled in me a passion for teaching, and to my colleagues, whom I have enjoyed working and relaxing with over the past 40 years. I cannot imagine a more rewarding experience and career than I have had at the University of Wyoming. ■

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