

**SAEA 2014 Annual Meeting  
Selected Poster Abstracts**

**Economic Revenue Impacts of Crop Selection and Acreage Shifts on Rural Arkansas Communities**

C. Robert Stark, Jr. and Wayne Miller

Arkansas row crop acreage has shifted dramatically from cotton to corn or soybean over the past ten years. Greater grain profits may benefit rural economies as increased revenue moves through local businesses and industries. Changes in revenue, employment, income and value added from the production acreage shifts are estimated.

**Returns to Dairy Cooling Technology**

Dean McCorkle, David Anderson and Dan Hanselka

In Texas, heat stress and reproduction are two major factors that have an adverse effect on milk production. This study evaluates the effects of cooling systems on milk production in the state. The estimated benefit per cow across all regions and all cooling technologies was \$37.12 per cow.

**The Contribution of Agriculture to the Arkansas Economy in 2011**

Jennie Popp, Leah English and Wayne Miller

Agriculture is responsible for approximately 17% of jobs, labor income and value added in the state of Arkansas. More than half of the contributions accrue in nonagricultural sectors. Continued strength of agriculture is of paramount importance to maintain the social and economic fabric of rural Arkansas communities.

**Spatial Analysis of Small Farm Productivity in Kentucky**

Buddhi Gyawali, Rosny Jean, Swagata “Ban” Banerjee

The factors influencing small farm productivity were analyzed in 120 counties in Kentucky. Spatial regression analysis was used to examine the relationship between farm productivity and farm, demographic, and spatial factors. Preliminary results suggest that soil type, farm location, ownership types, and farm size are highly correlated with farm productivity.

**A Case Study Analysis of Meat Goat Marketing in the United States**

Erika Styles, Lurleen Walters, Liu Xuanli, Keithly Jones and Gilbert Queeley

The US meat goat industry faces a number of challenges, including a lack of information on quantity exchanged and prices. This study utilizes primary data to analyze two links of the meat goat distribution channel, producers and auctions. Results identify predominant marketing strategies and barriers to enhance marketing efficiency.

## **Disaggregated Demand for Selected Vegetables Produced in the Southern United States**

Erika Styles, Chris Davis, Xuanli Liu, and Mack Nelson

This study analyzes the impact of demographic variables, retail prices, and vegetable expenditures on vegetable purchases. Nielsen 2006 Home Scan data is used to estimate the censored AIDS model for leading nonorganic vegetables grown in Georgia. These findings may help producers identify unfulfilled opportunities.

## **Farmers' Willingness to Take Small Business Accounting Training: Evidence from Field Survey in Virginia**

Oluwarotimi Odeh, Joseph Parsley Jr., Nick Demas & Tye Blount

This study examined farmers' willingness to take free accounting software training. Results show that 82% of surveyed farmers were willing to take, pay for and preferred farm-specific accounting training to improve farm management decisions in January and February. Farmers embraced technology to improve farm business management practices.

## **Economic Impact of Beef Cattle Best Management Practices: Restocking Strategies**

Alan Young, Joe C. Paschal, and Steven L. Klose

A prolonged 2011-2013 drought and poor grazing conditions in South Texas caused cattle producers to destock herds to minimize feed bills and take advantage of high cattle prices. As forage conditions recover, producers should closely evaluate their herd restocking options to optimize long-term profitability.

## **Economics of Aflatoxin Risk Management**

Jessica Sampson, Joe Outlaw, Mark Waller, Mark Welch, James Richardson, and Levi Russell

Aflatoxin contamination has been a perennial problem for Texas corn producers and users, but the recent development of biological controls (atoxigenics) may provide a cost effective means of risk management. Field level data is analyzed, and a spreadsheet analysis tool is developed to aid in producer risk management decisions.

## **Facilitating Highbush Blueberry Production Management by Employing a User Friendly Interactive Decision Support Tool**

Sokha Sok, Jennie Popp, and H. German Rodriguez

This new interactive budgeting tool allows producers to analyze costs, returns and assess risks associated with combinations of the four highbush blueberry production mechanisms: organic/conventional with open field/high tunnel production. This first of its kind tool can provide valuable assistance to producers in investment and production decision making.

### **Valuing the Seed of an Improved Switchgrass Variety**

Amadou Gouzaye, Francis M. Epplin, and Yanqi Wu

A switchgrass seed production program would be a prerequisite to the establishment of thousands of hectares of the dedicated energy crop. The objective is to determine the premium that could be charged for seed of a new switchgrass variety relative to seed from the best alternative commercially available variety.

### **Combined Effects of Crop Diversification and Tillage System on Great Plains Farms**

Pilja P. Vitale, Francis M. Epplin, Kristopher L. Giles, and Norman C. Elliott

The effects of crop diversity and tillage on wheat grain yield and net returns for farms in the western Great Plains were investigated. Farm level data were obtained for four seasons. Diversity was relatively more important than tillage. Net returns were greater on farms that included a diversified system.

### **Breakeven Prices of Biomass for a Dual-Purpose Forage and Biomass Production System**

Christopher N. Boyer, Andrew P. Griffith, David W. McIntosh, Gary E. Bates, Patrick D. Keyser, and Burton C. English

We determine the breakeven price of biomass from switchgrass, a mix of big bluestem and indiangrass (BBIG), and a combination of switchgrass and BBIG produced under a dual-purpose forage and biomass production system. For all grasses, the breakeven price is lower under the strict biomass harvest than the dual-purpose harvest.

### **Cost of Developing Dairy Heifers on Native-Warm Season Grasses**

Joe K. Lowe II, Christopher N. Boyer, Andrew P. Griffith, Gary E. Bates, Patrick D. Keyser, and James A. Larson

We calculate the \$/head/day for grazing bred dairy heifers on four native-warm season grass (NWSG) treatments to determine the lowest cost of feeding developing dairy heifers. Grazing bred dairy heifers on switchgrass had a lower cost/head/day than the other NWSG treatments and corn silage and wet distillers' grain rations.

### **Implications of Climatic Indicators on Agricultural Crop Prices in West Tennessee: A Causality Approach**

Rachna Tewari and Joseph Mehlhorn

A Granger causality analysis was conducted for climatic indicators causing soybean prices from 1975-2013 in high soybean production areas of West Tennessee. The results indicated a significant causality for precipitation impacting commodity price movements for soybeans, while no significant causality was detected between temperature indicators and soybean prices.

### **Case Studies of Crop Market Forward Curves**

Erin Hardin, Mark Welch, and John Robinson

Futures price data for feed grain and cotton were developed into a descriptive visual format to examine potential relationships between price level, carry in the market, and speculative position. That incidence of inversions appeared to precede major price rallies, while the speculative net position was lagged price rallies.

### **Using Experiential Learning Opportunities to Teach Agribusiness and Technical Skills**

Joey Mehlhorn, Sandy Mehlhorn, Scott Parrott, Jason Roberts, and Rachna Tewari

Students reported increased disciplinary problem solving skills, improved critical thinking, ability to function effectively in a group dynamic, and connection between classroom training and team activities. Communication anxiety was reported as a major anxiety among agribusiness students prior to the team activity. Team presentations did improve student anxiety.

### **Tracking U.S. Grain, Oilseed and Related Product Exports in Mexico**

Flynn Adcock and Mark Welch

Mexico is now the world's second largest grain importer. This poster describes the main ports of entry of U.S. grain exports to Mexico and the main transportation modes used to their destinations in Mexico. The poster provides Southern agricultural and applied economists timely information to share with their constituents.