

# Selected Posters

*Chair: Daniel Rainey, University of Arkansas*

## **Group 1—Agribusiness, Marketing, and Agricultural Prices**

**Wheat Grading in Turkey.** *B. Wade Brorsen and Dasheng Ji, Oklahoma State University.*

Much Turkish wheat is sold in open outcry auctions. In the past, buyers determined quality by looking at samples or biting kernels. Thanks to a World Bank pilot project, a modern electronic grading system was introduced to the Polatli market. The pilot project was evaluated to determine whether buyers are adopting the new information. Buyers adapted quickly to the new grading system and were paying large premiums after 3 months. The explanatory power of hedonic price models increased, indicating market efficiency was quick to improve. Thus, the pilot study was a success, since buyers quickly began to use the grading information.

**A Review of Current Conditions in the Texas Shrimp Industry, an Examination of Contributing Factors, and Suggestions for Remaining Competitive in the Global Shrimp Market.** *Lawrence L. Falconer, Texas Cooperative Extension, and Michael G. Haby, Russell J. Miget, and Gary L. Graham, Texas Cooperative Extension, Sea Grant College Program.*

This poster investigates current conditions in the shrimp industry, examines factors that are affecting it, and provides suggestions for remaining competitive. Recent changes in the global shrimp industry are having a negative impact on domestic, wild-harvest tropical shrimp fishermen and processors. The U.S. fleet now contributes only 12.4% to the do-

mestic market. Local producers clearly have lost the ability to significantly affect the domestic price of shrimp. Inexpensive labor in Southeast Asian and Central American shrimp-producing countries has changed the product form entering the United States. Tariffs and currency exchange rates are also important issues for shrimp-exporting countries.

**Can Local Feed Mills Survive Declining Margins and Integrator Mega Mills?** *Marty J. McVey, AGRI Industries, and C. Phillip Baumel, Iowa State University.*

Many livestock integrators have constructed low-cost, high-volume megamills to provide feed for their large-scale confinement feedlots concentrated within the trade territory. Such large-scale feeding has enabled integrators to capture additional freight savings by delivering large quantities of feed to production sites in semitrailer truckloads. This poster demonstrates how local feed mills can survive competition from megamills and declining margins. This poster also highlights that local feed mills will be forced to compete on the megamills' terms, driving many local feed companies to decide whether feed will be a profit or cost center in their future operations.

**Ultrasound Technology for Better Beef Price.** *Arbindra P. Rimal and Tommy Perkins, Southwest Missouri State University, and Joe C. Paschal, Texas A&M University.*

The sluggish growth in per capita consumption and a downward pressure on beef prices at the farm level have required producers to raise cattle that precisely target the meat attributes desired by consumers. Ultrasound

technology can help farmers to produce a carcass with an optimal mix of marbling and muscling as well as external fat. The results of this study show a high level of accuracy of ultrasound technology in predicting carcass attributes. An estimated hedonic regression model shows that the carcass attributes are reflected on the implicit beef price. Ultrasound technology helps producers produce carcasses with the desired attributes and thus obtain a higher price.

### **Group 2—Farm Management and Production**

**Weighing the Options of Citrus Mechanical Harvesting: A Grower's Perspective.** *Fritz M. Roka, University of Florida.*

Mechanical harvesting systems are being introduced to the Florida processed citrus industry. The available systems are offering their harvesting service at a lower price than is being paid to hand harvesting crews. However, mechanical systems are able to recover only 90% of the available crop, and growers must incur up-front costs to prepare the trees for mechanical systems. A decision-aid tool was developed to assist growers evaluate their particular grove-harvesting circumstances and determine whether a mechanical system would reduce their "net" harvesting costs.

**Production Contracting in the South: A Comparison of Poultry and Hogs.** *Mary Ahearn, Economic Research Service; Kenrett Jefferson, Auburn University; and David Banker, Economic Research Service.*

The use of production contracts is expanding in U.S. agriculture. Although they may provide farmers with reduced risks and costs and better meet consumer demands, they are controversial because they may also limit the ability of farmers to earn a return consistent with a competitive marketplace. Our results indicate that the cost growers pay for the greater price certainty to retain the responsibility for manure management, especially in the case of poultry, for long-term asset in-

vestment and death loss. Underlying the basic risk-sharing relationship is a substantial looming risk for a grower, namely that of losing a market for the product, since most contract producers do not have easy access to market alternatives.

**Economic Feasibility of Using GIS and Remote Sensing Technologies to Make Management Decisions.** *Kenneth W. Paxton, Huizhen Niu, Roger Leonard, and Ralph Bagwell, Louisiana State University, and Matt Bethel, ITD Spectral Visions, John C. Stennis Space Center.*

The study evaluates the economic feasibility of using data from remotely sensed imagery within geographic information systems to make insect management decisions in cotton production. Remote sensing imagery was analyzed to determine insect pressure in a cotton field and to develop prescriptions for treatment. Prescriptions were loaded into the computerized control system for the insecticide applicator. Insecticides were applied only to areas of the field where needed as indicated by the prescription. Profit maps were developed for conventional and prescription applications. Results indicated that it was possible to significantly reduce insecticide costs and improve profit potential using remote sensing technology.

**The Economic Benefit of Integrated Pest Management in Rice Production in Southeast Texas.** *David Anderson and M.O. Way, Texas A&M University.*

Integrated pest management (IPM) is the harmonious blending of tactics to control biotic pests in the most effective, affordable, and safe manner. A 3-year study in Texas compared the economic returns of IPM and conventionally managed rice. The average economic return over the 3-year period favored IPM by \$32.75/acre and resulted in less pesticide active ingredient applied per acre.

### **Group 3—International, Resource, and Environmental Economics**

**An Analysis of World Peanut Trade and FTAA: The Case of Latin America.** *Daeseob Lee and P. Lynn Kennedy, Louisiana State University, and Stanley M. Fletcher, University of Georgia.*

U.S. export share in the world export market has decreased because of heavy competition from leading and emerging exporters such as Argentina. Unfortunately, there has not been any detailed research on the Latin American peanut industry yet. As part of a Global Peanut Model, the Latin American Peanut industry is estimated using econometric techniques. The results show that Argentine peanut farmers have a greater willingness to respond to favorable world market prices to develop export markets than the other countries, given that the peanut is an inferior good. For the other countries, the world price does not affect their planting and trade decisions.

**Potential Economic Impacts of U.S. Agricultural Exports to Cuba on the South.** *C. Parr Rosson and Flynn J. Adcock, Texas A&M University.*

Interest in U.S.-Cuba agricultural trade increased with the passage of the Trade Sanctions Reform and Export Enhancement Act of 2000, allowing U.S. food exports to Cuba under specified conditions. The purpose of the study is to estimate the economic impacts of U.S. agricultural exports to Cuba on the U.S. economy. Economic output, income, value added, and employment are estimated for all 50 states and 22 commodity sectors. Potential impacts on the Southern states will be highlighted. Three likely alternative export growth scenarios are analyzed to reflect potential impacts on economic growth if U.S. agricultural exports to Cuba expand.

**Ecological Attitudes and Adoption of Best Management Practices: A Study of Louisiana Sugarcane Farmers.** *Steven A. Henning, Louisiana State University; Hugo Cardona, University of San Carlos of Guatemala; and Ying Zhong, Louisiana State University.*

A mail survey is used to collect data on ecological views of Louisiana sugarcane producers and their adoption of best management practices. Ecological views are measured using an application of the "New Ecological Paradigm Scale" (NEPS) and additional survey questions on producers' perceptions regarding agricultural nonpoint-source pollution. Results of the study show that most producers may currently be in compliance with EPA guidelines but may not be able to meet more rigorous standards. The ecological views of producers, which are based on NEPS responses, suggest the need for producer education programs on best management practices and benefits to the environment.

**Facilitated Blue Crab Management Workshops: Stakeholder Preferences and Lessons Learned in Florida.** *Sherry L. Larkin, University of Florida; Charles M. Adams, University of Florida and Florida Sea Grant; and Michael Jepson and Chris Debodisco, University of Florida.*

Blue crab (*Callinectes sapidus*) landings in Florida have fallen, while the number of fishers has increased following the 1995 net ban. In 2001, only 28% of permit holders participated in the fishery. Although a permit moratorium was recently extended until 2005, state regulators are concerned for the stock and economic viability of active fishers. Sixteen facilitated workshops were held around the state to obtain stakeholder preferences regarding future regulation. The workshops were unique in format, representation, and timing with regard to development of a management plan. Contrary to the initial hypotheses of regulators, consensus was identified regarding three regulatory issues.

**Group 4—Agricultural and Food Policy, and Quantitative Methods**

**A Bivariate Probit Contingent Valuation Method with Partial Observability: An Application to Black Bass Fishing.** *Abdulkali Bilgic and Wojciech Florkowski, University of Georgia.*

The Heckman sample selectivity model is not an appropriate tool when willingness to pay (WTP) is a qualitative dependent variable and not observed for nonparticipants for a specific fish species trip. We develop a consistent bivariate qualitative dependent variable model to incorporate the decision to participate and WTP for a black bass fishing trip.

**Confidence in Food Safety Regulations, Perceptions of Beef Irradiation, and Consumer Attitudes toward Irradiated Beef.**

*Senhui He and Stanley Fletcher, University of Georgia, and Arbindra Rimal, Southwest Missouri State University.*

This study investigates consumer attitudes toward beef irradiation. Results show that consumption of irradiated beef can be increased by enhancing consumers' confidence in food safety regulations, by dispensing with their unnecessary concerns about the side effects of beef irradiation, and by enhancing their knowledge about food irradiation.

**Frequent Filers: Anomalous Producers with Consecutive Multi-Year Indemnity Payments.** *Roderick M. Rejesus, Texas Tech*

*University; Bert B. Little and Ashley C. Lovell, Tarleton State University; Mike H. Cross, Planning Systems Inc.; and Stacey A. Olson, Heather D. Niverns, and Matthew D. Thomas, Tarleton State University.*

Key indicator variables are needed to develop sound "detection" scoring models that could help identify abuse in the crop insurance program. One behavioral indicator that may be suggestive of abuse in crop insurance is consecutive yield loss occurrence that triggers indemnity payments, which are always double the producer premiums paid. This study develops a database query algorithm that would allow identification of these individuals. The database query algorithm developed in this study provides a key component for the development of "detection" scoring models for crop insurance. The results of the database query algorithm are also of value to the Compliance Division of the Risk Management Agency (RMA) because this agency can then allocate its investigative resources more efficiently by focusing on the individuals identified by the algorithm rather than randomly selecting producers for investigation.