

# **CURRICULUM VITA**

Carl R. Dillon  
Professor  
Farm Management  
Department of Agricultural Economics  
65% Research, 35% Teaching  
January 2016



## VITA NARRATIVE - CARL R. DILLON

I am a Professor of Farm Management in the Department of Agricultural Economics. This narrative provides a summary of accomplishments and scholarly activity. My research program emphasizes analyzing the profitability and risk management potential of new technologies (especially precision agriculture), management strategies and alternative production practices for agricultural producers. My approach is to formulate economic decision-making models in a multidisciplinary, whole farm analysis setting. My appointment has averaged about 65% research and 35% teaching at the University of Kentucky, with service not reflected in these percentages. I have developed a nationally and internationally recognized applied research program.

My research productivity includes 69 refereed publications, primarily in national and international journals and proceedings. Of these 43 are refereed journal articles and about 65% are as senior author, averaging about 2.8 refereed publications annually. This compares favorably to the 2.5 that is in the upper 13% and 3.0 in the upper 9% according to a survey by Traxler, et al. of newly promoted Agricultural Economics Full Professors at Southern Land Grant Universities with a research appointment. Concurrently, my annual credit hours taught (using portion of responsibility in team taught courses and treating multiple sections as one course) has averaged about 5.5 while 6 credit hours represents the upper 26% of full professors for the same survey. I have published invited refereed journal articles in *Journal of Agricultural and Applied Economics*, *Journal of Crop Production* and, as a coauthor, in *Journal of Soil and Water Conservation*. I have four refereed book chapters by invitation. Still another article I published in *Agricultural Economics* has been translated into Russian at the recommendation of and by a visiting professor. I have invited presentations at the American Society of Agronomy/Crop Science Society of America/Soil Science Society of America meetings (precision agriculture to address low yielding areas), University of Alberta (precision management zone delineation), Bright Animal European Union Workshop (precision livestock economics) and Western Canadian Dairy Seminar (precision livestock feeding and forage production) as well as 15 European Conference refereed proceedings. My research has been the topic of news articles published in nationally popular farm magazines including *Farm Journal* and *Top Producer*. I have been interviewed as a precision agriculture economics expert for PBS Nova, USA Today and a national farm publication (USAG Magazine).

I have directly received funding as principal or co-principal investigator totaling over \$1.3 million from more than 50 grants; these grants are part of research funding totaling over \$4 million for all investigators that I have helped administer. I have 14 invited paper presentations or lectures, 4 organized symposia presentations, 37 published proceedings (of which 15 are refereed), 106 professional presentations (including published proceedings) and 28 posters. I have received a UK College of Agriculture Faculty Futures Award and UK College of Agriculture Wethington Awards.

My research program provides methodological, theoretical and empirical contributions to the multidisciplinary framework of farm management. My methodological contributions include novel mathematical programming formulations and applications. The melding of nonlinear and mixed integer programming models for assessing farmer's maximum willingness to pay and for precision management zone delineation are examples, incorporating Boolean logic to model the need for continuous management zones. Novel application of the traveling salesperson integer programming formulation to the application of factors of production to reduce risk is another contribution as is a mixed integer programming formulation allowing for the incorporation of heuristics in constrained optimization. I developed the original formulation to distinguish between uniform rate and variable rate input application through the use of ratio constraint procedures. My theoretical contributions involve the impacts of interactions among production practices and the importance of risk in economic modeling. This includes proofs dispelling misperceptions regarding variable rate input application as well as the development of a testing procedure for appropriate mean-variance analysis extending Meyer's seminal linkage to the expected utility hypothesis. I conceptualized and derived advanced break-even analytical techniques including output-output enterprise break-even requirements and break-even elasticity. My research demonstrated the need to consider multiple interactions to properly determine optimal production strategies. My empirical contributions include evaluation of numerous precision agriculture practices for profitability and risk management as well as optimal management strategies. I am known as a primary mathematical programmer among agricultural economists and as a primary economist among physical scientists studying precision agriculture.

I love teaching and advising, seeking to incorporate examples from my research; I meld my research program with my teaching program which has led to awards and placement of students. I am active in graduate and undergraduate advising and teaching. I have been recognized with the University of Kentucky Ken Freedman Outstanding Advisor Award. I have served as major advisor for students of two papers to win the Graduate Student Paper Distinguished Professional Contribution Award from the Southern Agricultural Economic Association. I have received teaching awards including Who's Who Among America's Teachers and the Arkansas Chapter of Gamma Sigma Delta's Teacher Award of Merit. While at the University of Arkansas, I served as faculty advisor, team coach and mentor of the National Championship Academic Bowl Team of the Student Section of the American Agricultural Economics Association. My former students (undergraduate, graduate and postdoctoral scholar) have progressed into positions such as farm managers, area farm management specialists, Ph.D. students, agribusiness managers, economists, postdoctoral scholars and assistant professors including Land Grant Universities.

My research program plays a significant role in my commitment to service and extension activities. I am serving on the editorial board of *Precision Agriculture* and have previously served as an associate editor for farm management and production economics submissions to the *Agronomy Journal* which serves as a multidisciplinary journal of the AAEA and other associations. I was a reviewer for a special edition of *Computers and Electronics in Agriculture* entitled "Precision Agriculture in Latin America." By invitation, I

also provided review of Kay and Edwards' textbook *Farm Management*, probably the most widely used textbook for Farm Management courses of American colleges and universities. I served as the SAEA selected papers co-chair and received the Distinguished Professional Contribution Award, SAEA, with S. Saghaian. I have served as the SAEA Student Affairs Committee Chair as well as a reviewer, session organizer and moderator for the AAEA and other organizations. I have been the Departmental Director of Undergraduate Studies and undertaken other departmental leadership roles. I have served on the University Appeals Board and Academic Advisory Committee for the Social Sciences at the university level. At the college level I have served on the Kentucky Agricultural Experiment Station Project Review Committee, the Precision Agriculture Steering Committee and the Undergraduate Curriculum Committee.

My applied research program includes popular articles (23), nonrefereed articles (17), refereed bulletins (4) and refereed university articles (3). I have received several requests to make presentations at extension organized field days and meetings, including invitations to speak at the National Association of Farm Business Analysis Specialists Annual Conference and the Kentucky Precision Agricultural Network meeting. I have demonstrated exemplary working relationships with my extension colleagues having numerous collaborative efforts with more than 80 deliverables including publications, presentations, posters and software development with extension faculty. My direct interaction with farmers has strengthened quality and adoption of research results.

My academic program highlights that farm management is especially well suited to active collaboration with several disciplines and extension; agricultural economics is a vital and integral discipline with direct contributions to the resolution of farm management problems. I have a program representing a model of research collaboration with research and extension scientists from many disciplines. I maintain a strong individual disciplinary contribution while contributing to multidisciplinary research projects of broader scope, providing the economic analysis element sorely needed in the area of farm management given the complexity and dynamic nature of farm management. I frequently list students first on publications and presentations with me serving as senior author to help place students in a profession noted for relatively low acceptance rates.

In summary, my national and international reputation is evidenced by my research, teaching and service accomplishments. My application of mathematical programming techniques, economic budgeting and risk analysis to economic evaluation has generated publications in a host of multidisciplinary national and international journals, both within and beyond the typical agricultural economics profession. This has afforded me the opportunity to make numerous scholarly contributions methodologically, theoretically and empirically through invited refereed journal articles, national and international invited presentations and a plethora of refereed publications and presentations. Research has enhanced my teaching resulting in professional awards. Collaboration with extension faculty has conveyed research findings to farmers, county agents, agribusiness managers and others. This has complemented my service to the academic profession, University, College and Department.

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### EDUCATION:

Ph.D. Agricultural Economics, Texas A&M University, May 1991  
Dissertation: *An Economic Analysis of Edwards Aquifer Water Management*  
Advisor - Bruce A. McCarl

M.S. Agricultural Economics, Texas A&M University, December 1987  
Thesis: *An Economic Study of Tactical Crop Production Decisions in the Blacklands:  
The Melding of Biophysical Simulation and Economic Decision Models*  
Advisor - James W. Mjelde

B.S. Agricultural Business, Sam Houston State University, December 1985

### PROFESSIONAL EXPERIENCE:

*Professor*, Department of Agricultural Economics, University of Kentucky. July 2008  
- Present. Average about 65% Research and 35% Teaching

*Associate Professor*, Department of Agricultural Economics, University of Kentucky.  
September 1998 – June 2008. Average about 65% Research and 35% Teaching

*Associate Professor*, Department of Agricultural Economics and Agribusiness,  
University of Arkansas. July 1996 - August 1998

*Assistant Professor*, Department of Agricultural Economics and Rural Sociology,  
University of Arkansas. August 1990 - June 1996

*Research Associate*, Department of Agricultural Economics,  
Texas A&M University. January 1988 - August 1990

*Research Assistant*, Department of Agricultural Economics,  
Texas A&M University. January 1986 - December 1987

*Student Assistant*, Department of Agricultural Sciences and Vocational Education,  
Sam Houston State University. September 1983 - December 1985

### PROFESSIONAL SPECIALTY:

Investigation of the profitability and risk management potential for selected alternative  
production practices, management strategies and new technologies for farmers  
Mathematical programming and whole farm modeling  
Precision agriculture economics

## **EVIDENCE OF NATIONAL AND INTERNATIONAL REPUTATION:**

Numerous publications (refereed journal articles, invited refereed journal articles and refereed published proceedings) in national or international journals or at international conferences. Collectively they reflect a national and international reputation as a leader in farm management generally and evaluation of the profitability and risk management potential of alternative production practices and new technology such as precision agriculture specifically

Career average refereed publications annually are about 2.8 which compares favorably to the 2.5 that is in the upper 13% and 3.0 in the upper 9% according to a survey by Traxler, et al. for Agricultural Economics Full Professors at Southern Land Grant Universities with a research appointment. Concurrently, annual credit hours taught (as weighted by portion of responsibility in team taught courses) has averaged about 5.5 while 6 credit hours represents the upper 26% of full professors for the same survey

Invited refereed journal articles, paper presentations and lectures at international, national and regional conferences demonstrate acceptance of international and national reputation by various organizations (including *Journal of Agriculture and Applied Economics* and *American Society of Agronomy/Crop Science Society of America/Soil Science Society of America*)

Interviewed as an expert in precision agriculture economics for national publications:

PBS Nova: <http://www.pbs.org/wgbh/nova/next/tech/farming-with-robotics-automation-and-sensors/>

USA Today

USAG Magazine, a national farm publication

Nationally highlighted research in *Farm Journal*, *Top Producer* and *Science News Online*

Service on the editorial board of *Precision Agriculture*

Service as associate editor (as AAEA representative) for farm management and production economics submissions to the *Agronomy Journal* which functioned as a multidisciplinary journal of the AAEA and other associations

Invitation to edit a book on economics as the first in an international series on precision agriculture to be published by Springer

Invited speaker at National Association of Farm Business Analysis Specialists Annual Conference to discuss production risk management

Review at invitation of Kay and Edwards' *Farm Management* (4<sup>th</sup> edition), a widely used textbook for Farm Management courses across American colleges and universities

Review of special edition of *Computers and Electronics in Agriculture*, Volume 58, Issue 1, August 2007, entitled "Precision Agriculture in Latin America"

## RESEARCH

### BOOK CHAPTERS:

\* - Indicates Senior Authorship throughout refereed publications section

**Dillon, C.R.\***, J.M. Shockley and J.D. Luck. “A Spatial Economics Decision-making Guide for Conservation Reserve Program.” In *GIS Applications in Agriculture, Volume 4: Conservation Planning*. T. Mueller and G. Sassenrath, eds. Invited refereed chapter. pp. 233-244. 2015. CRC Press.

T.G. Mueller, D. Zourarakis, G.F. Sassenrath, B. Mijatovic, **C. Dillon**, E. Gianello, R. Barbieri, M. Rodrigues, E.A. Rienzi and G.D. Faleiros. “Remote Sensing, Soil Surveys, and Topographic Analysis for Conservation Planning.” In *GIS Applications in Agriculture, Volume 4: Conservation Planning*. T. Mueller and G. Sassenrath, eds. Invited refereed chapter. pp. 11-36. 2015. CRC Press.

**Dillon, C.R.\*** “A Framework for Economic Analysis of Cropping Systems: Profitability, Risk Management and Resource Allocation.” In *Cropping Systems: Trends and Advances*. A. Shrestha, ed. Also listed as invited refereed journal article. pp. 409-432. 2003. Haworth Press.

McCarl, B.A., **C.R. Dillon**, K.O. Keplinger and R.L. Williams. “Limiting Pumping from the Edwards Aquifer: An Economic Investigation of Proposals, Water Markets, and Spring Flow Guarantees.” In *The Management of Water Resources, Irrigated Agriculture and the Environment*. J.S. Shortle and R.C. Griffin, eds. pp. 257-268. 2001. Edward Elgar Publishing Inc. Also listed as a refereed journal article.

### REFEREED JOURNAL ARTICLES:

Vassalos, M., W. Hu, T. Woods, J. Schieffer and **C. Dillon**. “Risk Preferences, Transaction Costs, and Choice of Marketing Contracts: Evidence from a Choice Experiment with Fresh Vegetable Producers.” *Agribusiness*. (2016): forthcoming. DOI: 10.1002/agr.21450

Brown, R.M., **C.R. Dillon\***, J. Schieffer and J.M. Shockley. “The Carbon Footprint and Economic Impact of Precision Agriculture Technology on a Corn and Soybean Farm.” *Journal of Environmental Economics and Policy*. (2016): forthcoming. DOI:10.1080/21606544.2015.1090932

Schieffer, J. and **C.R. Dillon**. “The Economic and Environmental Impacts of Precision Agriculture and Interactions with Agro-Environmental Policy.” *Precision Agriculture*. 16,1 (2015): 46-61.

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- Shockley, J.M., **C.R. Dillon\*** and T. Stombaugh. “The Influence of Auto-Steer on Machinery Selection and Land Acquisition.” *Journal of the American Society of Farm Managers and Rural Appraisers*. 75,1(2012):1-7.
- Vassalos, M., **C.R. Dillon\*** and P. Childs. “Empirically Testing for the Location-Scale Condition: A Review of the Economic Literature”. *Journal of Risk Model Validation*. 6,3(2012):51-66.
- Vassalos, M., **C.R. Dillon\*** and A. Pagoulatos. “A Hedonic Price Analysis of Corn and Soybean Herbicides”. *Food Economics*. 9,1&2(2012):117-128.
- Shockley, J.M., **C.R. Dillon\*** and T. Stombaugh. “A Whole Farm Analysis of the Influence of Auto-steer Navigation on Net Returns, Risk, and Production Practices.” *Journal of Agricultural and Applied Economics*. 43,1(2011):57-75.
- Dillon, C.R.\*** and J.M. Shockley. “The Value of Suitable Working Time for Crop Production Machinery Activities”. *Journal of International Farm Management*. 5,4(2011):1-11.
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- Luck, J.D., S.K. Pitla, S.A. Shearer, T.G. Mueller, **C.R. Dillon**, J.P. Fulton and S.F. Higgins. “Potential for Pesticide and Nutrient Savings via Map-based Automatic Boom Section Control of Spray Nozzles” *Computers and Electronics in Agriculture*. 70,1(2010):19-26.
- Gandonou, J., **C.R. Dillon\***, S.A. Shearer and T. Stombaugh. “Precision Agriculture Equipment Ownership versus Custom Hire: A Break-even Land Area Analysis” *Journal of the American Society of Farm Managers and Rural Appraisers*. 69,1(2006):106-116.
- Mueller, T.G., H. Cetin, R.A. Fleming, **C.R. Dillon**, A.D. Karathanasis and S.A. Shearer. “Erosion Probability Maps: Calibrating Precision Agriculture Data with Soil Surveys Using Logistic Regression. **Invited**. *Journal of Soil and Water Conservation*. 60,6 (2005):121-127.

- Stull, J.D., **C.R. Dillon\***, S.G. Isaacs and S.A. Shearer. "Using Precision Agriculture Technology for Economically Optimal Strategic Decisions: The Case of CRP Filter Strip Enrollment." *Journal of Sustainable Agriculture*. 24,4(2004):79-96
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- Popp, M.P., **C.R. Dillon** and T.C. Keisling. "Economic and Weather Influences on Soybean Planting Strategies on Heavy Soils." *Agricultural Systems*. 76,3(2003):969-984.
- Popp, M.P., T.C. Keisling, R.W. McNew, L.R. Oliver, **C.R. Dillon** and D.M. Wallace. "Planting Date, Cultivar and Tillage System Effects on Dryland Soybean Production." *Agronomy Journal*. 94,1(2002):81-88.
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- Dillon, C.R.\*** "Production Practice Alternatives for Income and Suitable Field Day Risk Management." **Invited.** *Journal of Agricultural and Applied Economics*. 31,2(1999): 247-261. Also listed as Invited Paper Presentation.
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- Dillon, C.R.\*** "Heuristic Optimization for Variable Rate Nitrogen and Seeding Decisions." In *Precision Agriculture '13: Proceedings of the 9<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford, ed. Wageningen Academic Publishers. Lleida, Catalonia (Spain). July 7-11, 2013. 761-768.
- Dillon, C.R.\*** and Y. Kusunose. "Dispelling Misperceptions Regarding Variable Rate Applications." In *Precision Agriculture '13: Proceedings of the 9<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford, ed. Wageningen Academic Publishers. Lleida, Catalonia (Spain). July 7-11, 2013. 769-776.
- Schieffer, J. and **C.R. Dillon**. "Precision Agriculture and Agro-environmental Policy." In *Precision Agriculture '13: Proceedings of the 9<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford, ed. Wageningen Academic Publishers. Lleida, Catalonia (Spain). July 7-11, 2013. 755-760.

- Shockley, J.M., **C.R. Dillon\*** and T. Stombaugh. “Auto-steer Navigation Profitability and Its Influence on Management Practices: A Whole Farm Analysis.” In *Precision Agriculture '09: Proceedings of the 7<sup>th</sup> European Conference on Precision Agriculture* through European Federation for Information Technology in Agriculture. E.J. van Henten, D. Goense and C. Lokhorst, eds. Wageningen Academic Publishers. Wageningen, Netherlands. July 6-8, 2009. 1-7.
- Stombaugh, T.S., R.S. Zandonadi and **C.R. Dillon**. “Assessing the Potential of Automatic Section Control.” In *Precision Agriculture '09: Proceedings of the 7<sup>th</sup> European Conference on Precision Agriculture* through European Federation for Information Technology in Agriculture. E.J. van Henten, D. Goense and C. Lokhorst, eds. Wageningen Academic Publishers. Wageningen, Netherlands. July 6-8, 2009. 759-766.
- Dillon, C.R.\***, S. Shearer, J. Fulton and S. Pitla. “Improved Profitability via Enhanced Variable Rate Application Management in Grain Crop Production.” In *Precision Agriculture '07: Proceedings of the 6<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford, ed. Wageningen Academic Publishers. Skiathos, Greece. June 3-6, 2007. 819-825.
- Dillon, C.R.\***, T.S. Stombaugh, B. Kayrouz, J. Salim and B.K. Kostra. “An Educational Workshop on the Use of Precision Agriculture as a Risk Management Tool.” In *Precision Agriculture '07: Proceedings of the 6<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford, ed. Wageningen Academic Publishers. Skiathos, Greece. June 3-6, 2007. 861-867.
- Gandonou, J. and **C.R. Dillon\***. “Precision Timing and Spatial Allocation of Economic Fertilizer Application Considering Suitable Field Days.” In *Precision Agriculture '07: Proceedings of the 6<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford, ed. Wageningen Academic Publishers. Skiathos, Greece. June 3-6, 2007. 737-743.
- Shockley, J.M., **C.R. Dillon\*** and S. Saghaian. “Precision Agriculture Adoption and the Optimal Location of Technology Providers in Kentucky, USA.” In *Precision Agriculture '07: Proceedings of the 6<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford, ed. Wageningen Academic Publishers. Skiathos, Greece. June 3-6, 2007. 769-773.
- Stombaugh, T.S. B.K. Kostra, **C.R. Dillon**, T.G. Mueller and A.C. Pike. “Implications of Topography on Field Coverage When Using GPS-Based Guidance.” In *Precision Agriculture '07: Proceedings of the 6<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford, ed. Wageningen Academic Publishers. Skiathos, Greece. June 3-6, 2007. 465-471.



Fulton, J., S. Shearer, S. Higgins, T. McDonald, **C.R. Dillon** and T. Stombaugh. "Variable-Rate Fertilizer Application Assessment Using an As-Applied Methodology." In *Precision Agriculture '07: Proceedings of the 6<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford, ed. Wageningen Academic Publishers. Skiathos, Greece. June 3-6, 2007. 681-687.

**Dillon, C.R.\***, S. Saghaian, J. Salim and M. Kanakasabai. "Optimal Water Storage Location and Management Zone Delineation Under Variable Subsurface Drip Irrigation." In *Precision Agriculture '05: Proceedings of the 5<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford, ed. Wageningen Academic Publishers. Uppsala, Sweden. June 9-12, 2005. 959-965.

Salim, J., **C.R. Dillon\***, S. Saghaian and D. Hancock. "Economic Response of Site Specific Management Practices on Alfalfa Production Quantity and Quality." In *Precision Livestock Farming '05: Proceedings of the 2<sup>nd</sup> European Conference on Precision Livestock Farming*. S. Cox, ed. Wageningen Academic Publishers. Uppsala, Sweden. June 9-12, 2005. 241-247.

**Dillon, C.R.\***, T. Mueller and S.A. Shearer. "An Economic Optimization Model for Management Zone Configuration." In *Precision Agriculture: Proceedings of the 4<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford and A. Werner, eds. Berlin, Germany. June 15-19, 2003. 165-169.

**Dillon, C.R.\***, S.A. Shearer, J. Fulton and M. Kanakasabai. "Optimal Path Nutrient Application Using Variable Rate Technology." In *Precision Agriculture: Proceedings of the 4<sup>th</sup> European Conference on Precision Agriculture*. J. Stafford and A. Werner, eds. Berlin, Germany. June 15-19, 2003. 171-176.

#### **REFEREED UNIVERSITY AND GOVERNMENT REPORTS AND BULLETINS:**

**Dillon, C.R.\***, J. Morris, C. Price and D. Metz. *The Technological and Economic Framework of Wine and Juice Production in Arkansas*. Arkansas Agricultural Experiment Station Bulletin #941, June 1994.

**Dillon, C.R.\***, C. Price, J. Morris and D. Ward. *An Appraisal of the Economic Feasibility of Wine and Juice Production in Arkansas*. Arkansas Agricultural Experiment Station Bulletin #942, June 1994.

McCarl, B.A., W.R. Jordan, R.L. Williams, L.L. Jones and **C.R. Dillon**. *Economic and Hydrologic Implications of Proposed Edwards Aquifer Management Plans*. Texas Water Resources Institute Technical Report 158 and Texas Agricultural Experiment Station PR 93-4, March 1993.

**Dillon, C.R.\***, J.W. Mjelde, B.A. McCarl, J.T. Cothren, J.R. Martin, M.E. Rister and C. Stockle. *Integrating Economic Analysis with Biophysical Simulation: Appraising Blacklands Corn Production*. Texas Agricultural Experiment Station Bulletin, B-1654, 1989.

## **REFEREED UNIVERSITY AND GOVERNMENT ARTICLES:**

**Dillon, C.R.\***, C. Price and J. Morris. "Juice Production Economics in Small to Medium Sized Wineries." *Arkansas Farm Research*. Vol. 42 No. 5, September-October (1993):10-11.

**Dillon, C.R.\***, C. Price and J. Morris. "Economic Analysis of Winery Business Operations." *Arkansas Farm Research*. Vol. 42 No. 2, March-April (1993):8-9.

Carter, J.D., J.W. Goodwin and **C.R. Dillon**. "Estimating Changes in U.S. Pork Production." *Arkansas Farm Research*. Vol. 41 No. 2, March-April (1992):6-8.

## **GRANTS AWARDED:**

National Natural Science Foundation of China. 2011-2013. "Impact of Agricultural Insurance on Production Decisions: Empirical and Simulated Evidence from Shanghai, Zhejiang, Anhui and Sichuan". Xi, A.(PI), P. Lue, **C. Dillon**, W. Hu(Co-PI), Y. Zhang, M. Vassalos and B. Li, \$27,000.

United States Department of Agriculture. CSREES-Special Grant through Hatch Funds. 2010-2013. Precision Resources Management, Phase V. "Precision Agriculture's Impact on Kentucky Farmers' Carbon Footprint." **C. Dillon** and J. Shockley. \$45,051.

United States Department of Agriculture. CSREES-Special Grant through Hatch Funds. 2009-2012. New Crop Opportunities: Phase X. "Whole Farm Analysis of Edamame Production in Kentucky." **C. Dillon** and J. Shockley. \$49,046.

Southern Region Risk Management Education Center. USDA – CSREES RMA. \$49,961. Retirement Portfolio Planning for Farmers. **C. Dillon** and E. Bazen. 2007.

United States Department of Agriculture. CSREES-Special Grant through Hatch Funds. 2007-2008. Precision Resources Management, Phase II. "Lightbar and Soil Types under Variable Fertilizer Application." **C. Dillon**, G. Halich and J. Gandonou. \$49,851.

United States Department of Agriculture. CSREES-Special Grant through Hatch Funds. 2007-2008. New Crop Opportunities: Phase VIII. "An Economic Evaluation of NonGMO Corn and NonGMO Soybeans." **C. Dillon**. \$31,360.

United States Department of Agriculture. CSREES-Special Grant. 2006-2009. New Crop Opportunities: Phase VII. "A Whole Farm Management Profit and Risk Model." **C. Dillon**. \$53,583.

United States Department of Agriculture. CSREES-Special Grant. 2006-2009. Precision Resources Management, Phase I. "Precision Timing and Spatial Allocation of Economic Fertilizer Application." **C. Dillon** and J. Gandonou. \$40,000.

- Southern Region Risk Management Education Center. USDA – CSREES RMA. \$39,976. Precision Agriculture Decision Aids for Risk Reduction. **C. Dillon**, T. Stombaugh, S. Isaacs and J. Salim. 2005.
- United States Department of Agriculture. CSREES-Special Grant. 2005-2008. New Crop Opportunities: Phase VI. “An Econometric Assessment of Specialty Grain Crops in Kentucky.” **C. Dillon** and S. Isaacs. \$56,806
- United States Department of Agriculture. CSREES-Special Grant. 2004-2007. “Precision Agriculture: Development and Assessment of Integrated Practices for Kentucky Producers, Phase VI.” S. Shearer, T. Mueller and **C. Dillon**. \$615,682.
- United States Department of Agriculture. CSREES-Special Grant. 2004-2007. New Crop Opportunities: Phase V. “A Risk Management Analysis of Low Phytate Corn in Kentucky.” **C. Dillon**, M. Kanakasabai, R. Fleming and S. McNeill. \$40,054.
- Natural Resources Conservation Service. 2004-2007. “Demonstration of Enhanced Technologies for Land Application of Animal Nutrient Sources in Sensitive Watersheds.” S. Higgins, S. Shearer, M. Coyne, R. Coffey, **C. Dillon**. \$354,572.
- United States Department of Agriculture. CSREES-Special Grant. 2003-2006. “Precision Agriculture: Development and Assessment of Integrated Practices for Kentucky Producers, Phase IV.” Scott Shearer, Thomas Mueller and **Carl Dillon**. \$689,110, including \$68,724 for “Integration of Management Zone Research” and \$69,167 for “Variable Rate Technology Risk Management”
- United States Department of Agriculture. CSREES-Special Grant. 2002-2005. “Precision Agriculture: Development and Assessment of Integrated Practices for Kentucky Producers, Phase IV.” Scott Shearer, Thomas Mueller and **Carl Dillon**. \$685,620, including \$112,494 for “Tracking Field Operations for Economic Analysis and Identity Preservation”
- United States Department of Agriculture. CSREES-Southern Regional IPM Program. 2001-2004. “Development of a Soybean Aphid Management Strategy for the Southern Region.” Co-principal Investigator. \$21,300 of \$133,755.
- United States Department of Agriculture. CSREES-Special Grant. 2001-2004. “Precision Agriculture: Development and Assessment of Integrated Practices for Kentucky Producers, Phase III.” Scott Shearer, Thomas Mueller and **Carl Dillon**. \$701,162, including \$56,976 for “Optimal Management Zone Delineation”, \$40,070 for “Breakeven Analysis and Interest Rate Considerations in Precision Agriculture Adoption” and \$59,058 for “Economic Advisory Aids for Precision Agriculture Users”

United States Department of Agriculture. CSREES-Special Grant. 2000-2003. "Precision Agriculture: Development and Assessment of Integrated Practices for Kentucky Producers, Phase II." Scott Shearer, Thomas Mueller and **Carl Dillon**. \$795,174 including \$54,900 for "Precision Farming Adoption in Kentucky: The Role of Capital Costs and Farm Size".

United States Department of Agriculture. CSREES-Special Grant. 1999-2002. "Precision Agriculture: Development and Assessment of Integrated Practices for Kentucky Producers." Scott Shearer, Thomas Mueller and **Carl Dillon**. \$467,800, including \$48,000 for "An Economic Assessment of Precision Agriculture and Decision Aids"

Kentucky Corn Growers' Association, 1999. "Precision Agriculture: Development and Assessment of Integrated Practices for Kentucky Producers." Scott Shearer, Thomas Mueller and **Carl Dillon**. \$4680.

Arkansas Rice Research and Promotion Board, 1998. "Investigation and Application of Whole Farm Systems Approach to Crop Production Management." Co-principal Investigator. \$15,450.

Arkansas Soybean Promotion Board, 1998. "Investigation and Application of Whole Farm Systems Approach to Crop Production Management." Co-principal Investigator. \$10,000.

Arkansas Soybean Promotion Board, 1998. "Improving Soybean Profitability: Economics of Production." Co-principal Investigator. \$36,000 of \$72,000.

Arkansas Soybean Promotion Board, 1998. "Low-Input Irrigated Soybeans on Heavy Clay." Co-principal Investigator. \$1,600 of \$10,000.

Arkansas Soybean Promotion Board, 1998. "Low-Input Nonirrigated Soybean Production." Co-principal Investigator. \$0 of \$44,000.

Arkansas Rice Research and Promotion Board, 1997. "Investigation and Application of Whole Farm Systems Approach to Crop Production Management." Co-principal Investigator. \$15,000.

Arkansas Soybean Promotion Board, 1997. "Improving Soybean Profitability: Economics of Production." Co-principal Investigator. \$41,750 of \$75,250.

Arkansas Soybean Promotion Board, 1997. "Improving Soybean Profitability: Soybean Production Under Low-Input Nonirrigated Conditions." Co-principal Investigator. \$8,836 of \$114,758.

Dale Bumpers College of Agricultural, Food & Life Sciences, 1996. "Economic Analysis of Arkansas' Agricultural Sector." Co-principal Investigator. \$3,250 of \$17,250.

Arkansas Soybean Promotion Board, 1996. "Improving Soybean Profitability: Economics of Production." Co-principal Investigator. \$42,000 of \$75,407.

Arkansas Soybean Promotion Board, 1996. "Improving Soybean Profitability: Soybean Production Under Low-Input Nonirrigated Conditions." Co-principal Investigator. \$9,920 of \$104,758.

Foundation Funding for Competitive Events, 1996. "Support for the University of Arkansas Academic Bowl Teams at the 1997 Student Section of the American Agricultural Economics Association Meeting." \$1,000.

Dale Bumpers College of Agricultural, Food and Life Sciences, 1995. "An Investigation of the Importance and Impact of the Food Processing Industry on the Arkansas Economy." \$14,140 of \$19,640.

Arkansas Soybean Promotion Board, 1995. "Improving Soybean Profitability: Economics of Production." Co-principal Investigator. \$42,750 of \$75,000.

Arkansas Soybean Promotion Board, 1995. "Improving Soybean Profitability: Soybean Production Under Low-Input Nonirrigated Conditions." Co-principal Investigator. \$9,920 of \$75,000.

Foundation Funding for Competitive Events, 1995. "Support for the University of Arkansas Academic Bowl Teams at the 1996 Student Section of the American Agricultural Economics Association Meeting." \$1,500.

University of Arkansas Teaching and Faculty Support Center, 1995. "Teaching Grant Program." \$2,000.

Arkansas Soybean Promotion Board, 1994. "Improving Soybean Profitability: Economics of Production." Co-principal Investigator. \$42,750 of \$75,000.

Arkansas Soybean Promotion Board, 1994. "Improving Soybean Profitability: Soybean Production Under Low-Input Nonirrigated Conditions." Co-principal Investigator. \$9,920 of \$75,000.

Foundation Funding for Competitive Events, 1994. "Support for the University of Arkansas Academic Bowl Teams at the 1995 Student Section of the American Agricultural Economics Association Meeting." \$1,850.

University of Arkansas Teaching Academy, 1994. Carl Dillon and Ed Fryar. Interactive Computer Projection Panel. \$2,000.

Arkansas Soybean Promotion Board, 1993. "Improving Soybean Profitability: Economics of Production." Co-principal Investigator. \$42,750 of \$75,000.

Arkansas Soybean Promotion Board, 1993. "Improving Soybean Profitability: Soybean Production Under Low-Input Nonirrigated Conditions." Co-principal Investigator. \$9,920 of \$75,000.

Foundation Funding for Competitive Events, 1993. "Support for the University of Arkansas Academic Bowl Teams at the 1994 Student Section of the American Agricultural Economics Association Meeting." \$1,000.

Arkansas Soybean Promotion Board, 1992. "Production Management Techniques for Lessening Cross Effects of Price Risk and Yield Risk." Principal Investigator. \$22,000.

University of Arkansas College of Agriculture and Home Economics, 1992. "New Faculty Grant." \$1,300 of \$3,900.

Foundation Funding for Competitive Events, 1992. "Support for the University of Arkansas Academic Bowl Team at the 1993 Student Section of the American Agricultural Economics Association Meeting." \$1,000.

Arkansas Soybean Promotion Board, 1991. "An Economic Analysis of Production Risk Related to Variability in Yields and Irrigation Requirements of Soybeans." Principal Investigator. \$15,710.

Low Input Sustainable Agriculture, 1991. "Use of Poultry Litter as a Soil Amendment in Southern Row Crop Agriculture: A Feasibility Study Based on Agronomic, Environmental, and Economic Factors." Co-principal Investigator.

Arkansas Rice Research and Promotion Board, 1991. "The Structure of Rice Production: A Profile of Producer Characteristics and Attitudes." Co-principal Investigator. \$23,995.

Foundation Funding for Competitive Events, 1991. "Support for the University of Arkansas Academic Bowl Team at the 1992 Student Section of the American Agricultural Economics Association Meeting." \$1,304.

Foundation Funding for Competitive Events, 1990. "Support for the University of Arkansas Academic Bowl Team at the 1991 Student Section of the American Agricultural Economics Association Meeting." \$630.

#### **INVITED PAPER PRESENTATIONS:**

**Dillon, C.R.,** J.K. Salim, A.J. McAllister and D.W. Hancock. "An Integrated Precision Production and Environmental Management Analysis of a Kentucky Dairy Farm." Invited paper presented at the Western Canadian Dairy Seminar. Red Deer, Alberta, Canada. March 8-10, 2006. *Advances in Dairy Technology : Strategies and Tools – Managing Tomorrow's Dairy Farm*. K. Beauchemin and L. Doepel, eds. 18(2006):103-113. Also listed as a published proceeding.

**Dillon, C.R.** and J. Grove. "Profitability and Risk Management Potential of Different Remedial Processes for Low Yielding Areas." Invited paper presented at the American Society of Agronomy/Crop Science Society of America/Soil Science Society of America meetings, Denver, Colorado. November 2-6, 2003.

**Dillon, C.R.** "Production Practice Alternatives for Income and Suitable Field Day Risk Management." Invited paper presented at the Southern Agricultural Economics Association meeting, Memphis, Tennessee. January 31-February 3, 1999. Also listed as an invited refereed journal article.

**Dillon, C.R.** "The Basis of Production, Marketing and Financial Decisionmaking for Wineries and Vineyards." *Proceedings of the Ninth Annual Midwest Regional Grape and Wine Conference*. pp. 37-54. Osage Beach, Missouri. January 30 - February 1, 1994. Also listed as a published proceeding.

**Dillon, C.R.** "Some Ideas for the Potential Improvement of Profitability for Wineries." *Proceedings of the Texas Wine and Grape Growers Association, 1993*. Houston, Texas. October 7-10, 1993. Also listed as a published proceeding.

#### **INVITED LECTURES:**

**Dillon, C.R.** and J.M. Shockley. "Insights from Applied Precision Agriculture Economics Research." 2015 John Deere Integrated Solutions Summer Meeting. Wilmington, NC. July 30, 2015.

**Dillon, C.R.** "Profitability of Dairy Cattle through Precision Livestock Farming." Bright Animal EU Framework 7 Coordination and Support Action Workshop. Copenhagen, Denmark. May 27-28, 2010.

**Dillon, C.R.** "An Economic Optimization Model for Management Zone Delineation." University of Alberta. Edmonton, AB. Canada. March 9, 2006.

**Dillon, C.R.** "Panel on Risk Perspectives." 2001 National Farm Business Analysis Specialists Annual Conference. Bowling Green, Kentucky. June 11-15, 2001.

**Dillon, C.R.** and A.G. Flynn. "Balancing Profits and Production Risk." 1994 Arkansas Soybean Research Conference. Jonesboro, Arkansas. December 7-8, 1994.

**Dillon, C.R.** "The Economic Management of Vineyards and Wineries." Kansas Grape Growers and Winemakers Association Annual Conference. Topeka, Kansas. February 19-20, 1994.

**Dillon, C.R.** and A.G. Flynn. "Profitability and Risk Management of Dryland Soybeans." 1993 Arkansas Soybean Research Conference. Little Rock, Arkansas. December 15-16, 1993.

**Dillon, C.R.**, J. Morris and D. Metz. "Economic Feasibility of Wine and Juice Production." Regional Enology Workshop. Fayetteville, Arkansas. May 28, 1993.

Morris, J., C. Price and **C.R. Dillon**. "The Economics of Winemaking Panel Discussion." Regional Enology Workshop. Fayetteville, Arkansas. May 19, 1992.

#### **ORGANIZED SYMPOSIA:**

**Dillon, C.**, Saghaian, S. and Salim, J.. Management Zones and Application Error. Organized symposium paper presented at the *Southern Agricultural Economics Association Annual Meetings*, Little Rock, Arkansas, February 5-9, 2005. Symposium abstract in the *Journal of Agricultural and Applied Economics*. 37, 2 (August 2005):515.

**Dillon, C.** and C.A. Oriade. "Exploring the Relationships between Direct Utility, E-V and MOTAD Risky Choices." Presented as part of Recurrent and Emerging Issues in Risk Management Models at the American Agricultural Economics Association meeting, Tampa, Florida. July 30-August 2, 2000.

**Dillon, C.** "Incorporation of Risk into Crop Budgets." Presented as part of Problems in Crop Enterprise Budgeting at the Southern Agricultural Economics Association meeting, Lexington, Kentucky, January 29-February 2, 2000. Symposium abstract in the *Journal of Agricultural and Applied Economics*. 32,2 (2000):417.

**Dillon, C.** and C.A. Oriade. "Simulation for Crop Production and Management." Presented as part of Agricultural Simulation in the 21<sup>st</sup> Century: An Evaluation of its Continuous Relevance at the American Agricultural Economics Association meeting, Toronto, Ontario, Canada, July 27-30, 1997. Symposium abstract in the *American Journal of Agricultural Economics*. 79,5 (1997):1687.

#### **PUBLISHED PROCEEDINGS:**

See above for *refereed* published proceedings articles

**Dillon, C.R.** and J. Shockley. "Precision Management for Enhancing Farmer Net Returns with the Conservation Reserve Program." Invited Paper. *Proceedings of the 10<sup>th</sup> International Conference on Precision Agriculture*. Denver, Colorado. July 18-20, 2010. 10 pp. Electronic (CD) proceedings.

**Dillon, C.R.**, J.K. Salim, A.J. McAllister and D.W. Hancock. "An Integrated Precision Production and Environmental Management Analysis of a Kentucky Dairy Farm." **Invited** paper presented at the Western Canadian Dairy Seminar. Red Deer, Alberta, Canada. March 8-10, 2006. *Advances in Dairy Technology : Strategies and Tools – Managing Tomorrow's Dairy Farm*. K. Beauchemin and L. Doepel, eds. 18(2006):103-113.



- Pierce, C., **C. Dillon** and L. Wells. "An Economic Optimization and Risk Management Model for Precision Deep Tillage." Poster presentation. *Book of Abstracts of the 5<sup>th</sup> European Conference on Precision Agriculture*. C, Heemskerk and M. Engvall, eds. Uppsala, Sweden. June 9-12, 2005. 241-242.
- Dillon, C.R.**, T. Mueller and S.A. Shearer. "The Value of Innovative Seed Coatings to Delay Germination under Field Average and Variable Rate Technology." *Proceedings of the 6<sup>th</sup> International Conference on Precision Agriculture*. Minneapolis, Minnesota. July 14-17, 2002. 1814-1827.
- Fulton, J.P., S.A. Shearer, T.S. Stombaugh, **C.R. Dillon** and S.F. Higgins. "'As-Applied' Model Validation for Variable-Rate Application of Granular Materials." *Proceedings of the 6<sup>th</sup> International Conference on Precision Agriculture*. Minneapolis, Minnesota. July 14-17, 2002. 1218-1227.
- Mueller, T.G., K.L. Wells, G.W. Thomas, R.I. Barnhisel, N.J. Hartsock, A. Kumar, **C.R. Dillon** and S.A. Shearer. "Soil Fertility Map Quality: Case Studies in Kentucky." *Proceedings of the 5<sup>th</sup> International Conference on Precision Agriculture*. Minneapolis, Minnesota. July 16-19, 2000. CD-ROM.
- Pearce, A., **C.R. Dillon**, T.C. Keisling, C. Friddle and M.P. Popp. "Using Deep Tillage to Improve Yields From Dryland Soybeans: An Economic Analysis." *Proceedings of the 22<sup>nd</sup> Annual Southern Conservation Tillage Conference for Sustainable Agriculture*. Georgia Agricultural Experiment Station Special Publication 95(1999):178-183.
- Gordon, E.C., T.C. Keisling, D.M. Wallace, L.R. Oliver and **C.R. Dillon**. "Influence of Tillage System, Planting Date and Cultivar Selection on Soil Water and Soybean Yield under Dryland Soybean Production." *Proceedings of the Southern Conservation Tillage Conference for Sustainable Agriculture*. AES Spec. Rpt. 186. pp. 32-37. Little Rock, Arkansas. July 15-17, 1998.
- Keisling, T.C., **C.R. Dillon** and E.E. Evans. "Ridge-Till Implementation on Full Scale Production Field: Keys to Success." *Proceedings of the 1995 Beltwide Cotton Conference*. pp. 1367-1368. San Antonio, Texas. January 4-7, 1995.
- Keisling, T.C., **C.R. Dillon**, L.R. Oliver, J.M. Faulkner and A.G. Flynn. "Profitability of Seven Nonirrigated Soybean Cropping Rotations on a Shallow Silt Loam Soil." *Proceedings of the 1995 Southern Tillage Conference for Sustainable Agriculture*. pp. 12-15. Jackson, Mississippi. June 1995.
- Keisling, T.C., **C.R. Dillon**, L.R. Oliver, F.L. Baldwin, L.O. Ashlock and E.E. Evans. "Preplant and Post-Plant Tillage for Full Season Soybeans on Clayey and Silt Loam Soils." *Proceedings of the 1994 Southern Conservation Tillage Conference for Sustainable Agriculture*. pp. 168-170. Columbia, South Carolina. June 7-9, 1994.

- Keisling, T.C., **C.R. Dillon** and E.E. Evans. "Successful Ridge-Till Implementations on a Production Cotton Field." *Proceedings of the 1994 Southern Conservation Tillage Conference for Sustainable Agriculture*. pp.171-173. Columbia, South Carolina. June 7-9, 1994.
- Dillon, C.R.**, M. Cochran and T. Windham. "An Economic Evaluation of Irrigated and Non-Irrigated Southern State Soybean Production." *Proceedings of the 1994 Southern Soybean Conference*. pp. 70-75. Memphis, Tennessee. February 14-16, 1994.
- Dillon, C.R.** "The Basis of Production, Marketing and Financial Decisionmaking for Wineries and Vineyards." *Proceedings of the Ninth Annual Midwest Regional Grape and Wine Conference*. pp. 37-54. Osage Beach, Missouri. January 30 - February 1, 1994. Also listed as an invited paper presentation.
- Dillon, C.R.**, J.R. Morris and C. Price. "Effects of Grape and Other Raw Material Prices on Winery Profitability." *Arkansas State Horticultural Society: Proceedings of the 114th Annual Meeting*. pp. 65-69. Fort Smith, Arkansas. November 17-18, 1993.
- Dillon, C.R.** and C. Rom. "Make 'Cents' with Good Orchard Economics." *Arkansas State Horticultural Society: Proceedings of the 114th Annual Meeting*. pp. 94-97. Fort Smith, Arkansas. November 17-18, 1993.
- Dillon, C.R.** "Some Ideas for the Potential Improvement of Profitability for Wineries." *Proceedings of the Texas Wine and Grape Growers Association, 1993*. Houston, Texas. October 7-10, 1993. Also listed as an invited paper presentation.
- Keisling, T.C., L.R. Oliver, F.L. Baldwin, L.O. Ashlock, **C.R. Dillon** and E.E. Evans. "Preplant and Post-Plant Tillage for Full Season Soybeans on Clayey and Silt Loam Soils." *Proceedings of the 1993 Southern Conservation Tillage Conference for Sustainable Agriculture*. pp. 132-134. Monroe, Louisiana. June 15-17, 1993.
- Evans, E.E., T.C. Keisling, L.R. Oliver, F.L. Baldwin, L.O. Ashlock and **C.R. Dillon**. "Stubble Management, Preplant Tillage, and Row Spacing for Double-Cropped Soybeans." *Proceedings of the 1993 Southern Conservation Tillage Conference for Sustainable Agriculture*. pp. 160-162. Monroe, Louisiana. June 15-17, 1993.
- Dillon, C.R.**, J.R. Morris and C. Price. "Economics of Adding a Juice Processing Line to an Existing Winery." *Arkansas State Horticultural Society: Proceedings of the 113th Annual Meeting*. Little Rock, Arkansas. November 19-20, 1992.

R. Lynn Williams, **C.R. Dillon** and B.A. McCarl. "An Economic Investigation of Edwards Aquifer Water Use Tradeoffs." *Papers of the 1992 Annual Meeting: Western Agricultural Economics Association*. pp. 422-428. Colorado Springs, Colorado. July 12-15, 1992.

**Dillon, C.R.**, J.W. Mjelde and B.A. McCarl. "Recommendations on the Implementation and Development of Biophysical Simulation Models in Agricultural Economic Research." *Proceedings of the Society for Computer Simulation*. pp. 741-746. Austin, Texas. July 24-27, 1989.

#### **PROFESSIONAL PRESENTATIONS:**

Vassalos, M., W. Hu, T. Woods, J. Schieffer and **C.R. Dillon**. Fresh Vegetable Growers' Risk Perception, Risk Preference and Choice of Marketing Contracts: A Choice Experiment. Paper presented at the Southern Agricultural Economics Association Annual Meeting, Orlando, Florida, February 2-5, 2013.

Vassalos, M. and **C.R. Dillon**. "Choice of Optimal Planting and Marketing Decisions for Fresh Vegetable Producers: A Mathematical Programming Approach". Paper presented at the Southern Agricultural Economics Association Annual Meeting, Birmingham, Alabama, February 6-9, 2012.

Brown, R., **C.R. Dillon**, J. Schieffer and J. Shockley. "The Impact of Precision Agriculture Techniques on Kentucky Grain Farmers' Carbon Footprint". Paper presented at the Southern Agricultural Economics Association Annual Meeting, Birmingham, Alabama, February 6-9, 2012.

Vassalos, M. and **C.R. Dillon**. "Going Organic or Conventional? A Case Study for the Farm Specific Factors Affecting the Transition to Organic Farming in Lake Kerkini: Greece". Paper presented at the 4th Annual International Symposium on Agriculture, Athens Institute for Education and Research, Athens, Greece, July 18-19, 2011.

Vassalos M. and **C.R. Dillon**. "A Hedonic Price Analysis of Corn and Soybean Herbicides." Paper presented at the 120th European Association of Agricultural Economists, Chania-Crete, Greece. September 1-4, 2010.

**Dillon, C. R.** and J. M. Shockley. "Interactive Effects of Production Practices on Risk Management Potential of Variable Rate Irrigation and Variable Rate Fertilization." Paper presented at the Western Agricultural Economics Association Annual Meetings, Kauai, HI. June 24-26, 2009.

Vassalos, M., **C.R. Dillon** and P. Karanikolas. "Farm Decision Making in a Multifunctional Context: The Case of Lake Kerkini District, Greece". Paper presented at the 113th European Association of Agricultural Economists seminar, Belgrade, Serbia, December 9-11, 2009.

- Shockley, J., **C. Dillon** and S. Shearer. “Cost Savings for Multiple Inputs with Swath Control and Auto-guidance Technologies.” Paper presented at the 9<sup>th</sup> International Conference on Precision Agriculture. Denver, Colorado. July 20-23, 2008.
- C. Dillon**, T. Mueller and S. Shearer. “Interdisciplinary Team Teaching of Precision Agriculture.” Paper presented at the 9<sup>th</sup> International Conference on Precision Agriculture. Denver, Colorado. July 20-23, 2008.
- Salim, J. and **C.R. Dillon**. “Precision Feeding in Dairy Ration Cost Minimization Under Producer’s Risk Management” Paper presented at the *Southern Agricultural Economics Association Annual Meetings*, Mobile, Alabama, February 5-9, 2007. Abstract in the *Journal of Agricultural and Applied Economics*. 39, 2 (August 2007):413.
- Gandonou, J. and **C.R. Dillon**. “Precision Timing and Spatial Allocation of Economic Fertilizer Application” Paper presented at the *Southern Agricultural Economics Association Annual Meetings*, Mobile, Alabama, February 5-9, 2007. Abstract in the *Journal of Agricultural and Applied Economics*. 39, 2 (August 2007):422.
- Shockley, J., S. Saghaian and **C.R. Dillon**. “Cost Sensitivity Analysis on the Optimal Location of Technology Providers in Kentucky” Paper presented at the *Southern Agricultural Economics Association Annual Meetings*, Mobile, Alabama, February 5-9, 2007. Abstract in the *Journal of Agricultural and Applied Economics*. 39, 2 (August 2007):425.
- Conrad, E., **C.R. Dillon** and J. Gandonou. “Variable Rate Fertilization Profitability on High-Oil Corn Production” Paper presented at the 8<sup>th</sup> International Conference on Precision Agriculture, Minneapolis, Minnesota, July 23-26, 2006.
- Gandonou, J. and **C.R. Dillon** “Precision Timing and Spatial Allocation of Economic Fertilizer Application” Paper presented at the 8<sup>th</sup> International Conference on Precision Agriculture, Minneapolis, Minnesota, July 23-26, 2006.
- Shockley, J., S.Saghaian, **C. Dillon** and L.Maynard. “A Logit Analysis of Precision Agriculture Adoption in Kentucky.” Paper presented at the 8<sup>th</sup> International Conference on Precision Agriculture. Minneapolis, Minnesota. July 23-26, 2006.
- Dillon C.**, J. Gandonou, B. Koostra, T. Stombaugh, T. Mueller “Evaluating the Economic Impact of Field Area Measurements” Poster presented at the 8<sup>th</sup> International Conference on Precision Agriculture, Minneapolis, Minnesota, July 23-26, 2006.

- Salim, J., **C. Dillon** and J. McAllister. Risk management on application of minimum-cost feed ration for nitrogen and phosphorus reduction on dairy farm. Paper presented at the 2006 American Agricultural Economic Association Meeting in July 23-27, 2006, Long Beach, California.
- Salim, J., **C. Dillon** and J. Gandonou. Profit maximization under risk reducing behavior using variable cutting timings for Kentucky alfalfa. Paper presented at the 2006 Precision Agriculture Conference in July 23-26, 2006, Minneapolis, MN.
- Pierce, C., **C. Dillon** and L. Wells. “An Economic Evaluation of Precision Deep-Tillage Practices through the Analysis of Comparative Enterprise Budgets.” Paper presented at the *Southern Agricultural Economics Association Annual Meetings*, Little Rock, Arkansas, February 5-9, 2005. Abstract in the *Journal of Agricultural and Applied Economics*. 37, 2 (August 2005):508.
- Saghaian, S., **C. Dillon**, J. Salim and M. Kanakasabai. “Comparison of Decision Rules for Subsurface Drip Irrigation Practices Using a Non-Linear Mathematical Programming Model.” Paper presented at the *Southern Agricultural Economics Association Annual Meetings*, Little Rock, Arkansas, February 5-9, 2005. Abstract in the *Journal of Agricultural and Applied Economics*. 37, 2 (August 2005):505-506.
- Salim, J., **C. Dillon**, S. Saghaian, J. McAllister and D. Amaral-Phillips. “Profitability of Dairy Cattle Through Precision Livestock Farming Management Practices.” Paper presented at the *Southern Agricultural Economics Association Annual Meetings*, Little Rock, Arkansas, February 5-9, 2005. Abstract in the *Journal of Agricultural and Applied Economics*. 37, 2 (August 2005):508.
- Salim, J., **C. Dillon**, J. McAllister and D. Hancock. An integrated precision production and environmental management analysis of a Kentucky Dairy Farm. Paper presented at the American Agricultural Economics Association (AAEA) Annual Meeting, July 24-27, 2005. Providence, Rhode Island, USA.
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- Oriade, C., **C.R. Dillon** and E. Vories. "Economic Analysis of Alternative Cropping and Row Spacing Systems in Arkansas Soybeans." *Farm Management and Marketing Newsletter*, Cooperative Extension Service. Vol. 4, No. 4, December 1996.
- Dillon, C.R.** and M.D. Oxner. "Wheat Planting Methods." *Farm Management and Marketing Newsletter*, Cooperative Extension Service. Vol. 4, No. 3, September 1996.
- Dillon, C.R.** "Harvest Breakeven Analysis." *Farm Management and Marketing Newsletter*, Cooperative Extension Service. Vol. 4, No. 2, June 1996.
- Dillon, C.R.** "Machinery Costs." *Farm Management and Marketing Newsletter*, Cooperative Extension Service. Vol. 4, No. 1, March 1996.
- Dillon, C.R.** "Base Decisions to Plant Corn on Economics." *Southwest Farm Press-Blacklands Northeast Edition*. Vol. 16 No. 8, April 20, 1989.

#### **DEPARTMENTAL PUBLICATIONS:**

- Mjelde, J.W., M.E. Rister, **C.R. Dillon** and R.D. Barker. 1986 Texas Corn/Grain Sorghum Producers' Survey Results. Department of Agricultural Economics. DIR 87-1 SP-4, Texas A&M University, July 1987.

Rister, M.E., J.W. Mjelde, M.R. Parker and **C.R. Dillon**. 1985 Gulf Coast Corn/Grain Sorghum Producers' Survey Results. Department of Agricultural Economics. DIR 86-1 SP-3, Texas A&M University, April 1986.

**SOFTWARE DEVELOPED:**

Isaacs, S., **C. Dillon** and L. Powers. Breakeven Harvest Yields: A Decision Aid. September 1999.  
<http://www.uky.edu/Agriculture/AgriculturalEconomics/data/baledharvestinstr.html>

Isaacs, S., **C. Dillon** and L. Powers. Roundup Ready Soybeans. July 1999.  
<http://www.uky.edu/Agriculture/AgriculturalEconomics/data/baledrrbeansinstr495.html>

## TEACHING

### SUMMARY RECENT COURSE EVALUATIONS:

Title	Enrollment	Year	Evaluation <sup>1</sup>
AEC 302 Agricultural Management Principles <sup>3</sup>	56	Spr 99	3.2/3.3
UK 101 Academic Orientation	17	Fall 99	NA/NA
AEC 302 Agricultural Management Principles <sup>3</sup>	49	Spr 00	3.6/3.4
AEC 661 Programming Models in Agricultural Economics	5	Spr 00	3.6/3.2
AEC 302 Agricultural Management Principles <sup>3</sup>	55	Spr 01	3.6/3.3
AEC 661 Programming Models in Agricultural Economics	8	Spr 01	3.2/3.1
AEN 599 Topics in Agr. Engineering: Precision Agriculture <sup>2</sup>	14	Spr 01	3.4/3.5
AEC 302 Agricultural Management Principles <sup>3</sup>	55	Spr 02	3.4/3.3
AEC 661 Programming Models in Agricultural Economics	5	Spr 02	NA/NA
BAE 599 Topics in Agr. Engineering: Precision Agriculture <sup>2</sup>	12	Spr 02	3.8/3.8
BAE 599 Topics in Agr. Engineering: Precision Agriculture <sup>2</sup>	9	Spr 03	3.6/3.7
AEC 302 Agricultural Management Principles <sup>3</sup>	53	Fall 03	3.4/3.6
AEC 302 Agricultural Management Principles <sup>3</sup>	52	Spr 04	3.3/3.5
AEC 661 Programming Models in Agricultural Economics	8	Spr 04	3.3/3.6
BAE 599 Topics in Agr. Engineering: Precision Agriculture <sup>2</sup>	10	Spr 04	3.4/3.3
BAE 599 Topics in Agr. Engineering: Precision Agriculture <sup>2</sup>	8	Spr 05	3.7/3.7
AEC 302 Agricultural Management Principles <sup>3</sup>	55	Spr 05	3.3/3.4
AEC 302 Agricultural Management Principles <sup>3</sup>	54	Spr 06	3.4/3.6
AEC 661 Programming Models in Agricultural Economics	6	Fall 06	3.3/3.4
AEC 302 Agricultural Management Principles <sup>3</sup>	48	Fall 07	3.3/3.4
AEC 661 Programming Models in Agricultural Economics	6	Fall 07	3.5/3.8
AEC 302 Agricultural Management Principles <sup>3</sup>	50	Fall 08	2.8/2.8
AEC 661 Programming Models in Agricultural Economics	2	Fall 08	NA/NA
AEC 302 Agricultural Management Principles <sup>3</sup>	75	Fall 10	3.1/3.2
AEC 302 Agricultural Management Principles <sup>3</sup>	53	Fall 11	2.6/2.6
AEC 661 Programming Models in Agricultural Economics	10	Fall 11	3.8/4.0
HON 115 World Food Issues II: Your Daily Bread	15	Spr 12	3.9/4.0
AEC 302 Agricultural Management Principles <sup>3</sup>	55	Fall 12	3.4/3.6
AEC 661 Programming Models in Agricultural Economics	8	Fall 12	3.6/3.8
AEC 302 Agricultural Management Principles <sup>3</sup>	42	Fall 13	3.4/3.6
AEC 661 Programming Models in Agricultural Economics	8	Fall 13	3.8/3.9
AEC 302 Agricultural Management Principles <sup>3</sup>	53	Fall 14	3.1/3.4
AEC 580 Advanced Farm Management	7	Fall 15	3.5/3.7

1. Overall value of course /overall quality of teaching (on a 4.0 scale); not included is a week of instruction on farm business management, a management lab exercise and exam questions for ASC 382, Animal Production Principles
2. Team taught, responsible for 1/3 of course, individual instructor evaluations begin 2002 while group instructor evaluations precede that
3. Represents an average evaluation of the two sections offered

## **COURSE DESCRIPTIONS:**

### AEC 302 Agricultural Management Principles - 4 credits

A comprehensive study of economic principles and management tools useful in farm and agribusiness decision making. Utilizes a systems approach to the planning, implementation and control of the agricultural business. Specific attention to application of management and decision theory, economic principles used in decision making, and risk management strategies. Emphasis on planning the future course of the business, acquiring and managing the necessary resources, and establishing physical and financial control over the business. Lab incorporates micro-economic applications of management principles developed in lectures.

### AEC 661 Programming Models in Agricultural Economics - 3 credits

A study of some mathematical programming models useful in agricultural economics; includes an examination of the structure of the models themselves, economic interpretation of their components and their use in research in agricultural economics.

### AEN 599 or BAE 599 Topics in Agr Engineering: Precision Agriculture - 3 credit hours

This is a multidisciplinary, team taught class for which Dr. Dillon has approximately one third of the teaching responsibility. It is a course designed for students who desire to understand the acquisition and analysis of geographically referenced data for the management of crop production systems. Topics include: mapping, map projections, implementation of global positioning systems, data formats, geographic information systems, grid sampling, soil fertility and physical properties, yield monitoring, variable-rate application, crop modeling and economics.

### UK 101 Academic Orientation - 1 credit hour pass/fail

This course is designed to help first-year students 1) form beneficial relationships with students, faculty and staff, 2) understand the purpose and nature of a university education in order to make the most of opportunities at UK, 3) acquire skills for achieving academic success such as study skills and library skills, 4) increase awareness and use of University resources (e.g., instructors, advisors, library, Counseling and Testing Center) and 5) reflect on transitional issues that first-year students often face in a college environment.

## **SELECTED RECENT STUDENT COMMENTS:**

### AEC 302

- You have been arguably the best professor I have ever had here at my time at UK. Keep doing what you are doing. This course has been worth my time and money.
- One of the best teachers I've had in my college career by far. Extremely helpful with questions, flexible and fair with students and grading, fun to listen to. Makes hard material much easier to grasp.

- Dr. Dillon is a great professor, very knowledgeable about the subject, and he will take as much time needed to help you with any problems you have in understanding some topics in the class.
- He was a good professor who cares about the success of his students and does what he can to help them succeed.
- Dr. Dillon is wonderful at engaging students in lecture. It can be difficult to make material fun and I think he did a great job. It is very obvious that Dr. Dillon is in the right profession.
- Dr. Dillon is a great teacher; he presents information well and is excited about the course. This helps students get excited to learn more.
- Great job!
- The class set up is challenging but fair.
- One of the best professor and TA combos I have had. Almost like Batman & Robin.
- Very interesting topics, kept class up to date & fun.
- Mr. Dillon did a great job for a different class. Tried his best to make it interesting.
- I strongly believe that the professor presented the material in an effective manner and really challenged my knowledge on the subject. Though I may be starting a microbrewery I still found a way to incorporate the material into my business model. Overall I learned a lot and rather enjoyed the class.
- I really enjoyed this class and his teaching methods.
- Tests are pretty hard but it all works out with the lab and in class assignments.
- Great class and a nice teacher.
- Great class and one of my favorites in college.
- Teacher has a lot of knowledge on the subject.
- Very well instructed. Enjoyed the class and learned a lot.
- Very good class, mainly because Dr. Dillon is an outstanding instructor. I really enjoyed this class.
- Dr. Dillon really knows his Ag. Econ! I like how the grading is set up, with emphasis on the lab. Lab is where I learned the most.
- Dr. Dillon did a very good job. He made the class interesting.
- Good teacher.
- Although the course was a challenge, I feel I was able to take some very valuable information away from it. The course could not have been taught any better!
- Good job keeping us awake!
- Dr. Dillon is a great teacher that can relate topics to the real world. He is one of the best teachers that I have had at UK.
- Good class; well taught.
- Dr. Dillon did a good job teaching the material. He was eager to help students both in and out of the classroom.
- I enjoyed the class, you were very easy to understand and helpful when questions were raised. You pushed me to learn and understand what was going on.
- I enjoyed this class and the instructor.
- Great instructor, I would recommend this class and instructor to a friend.
- Great class with a very intelligent professor, definitely an asset to the University.
- Dr. Dillon is by far the best professor I have had in college.

- Good job teaching this class.
- I really thought that this class was one of the best I have taken here at the University. I thoroughly enjoyed attending class.
- Dr. Dillon is a great teacher, very helpful and has a wealth of knowledge on the subject.
- Enthusiastic and engaging
- Hire more people like Dr. Dillon. The last teacher I had like this was in the 8th grade.
- I've learned more in this class than I ever did in the College of Business. Thanks Dr. Dillon.
- Thought the class was well organized
- This is a very important class for everyone. I almost wish I could take it again!
- Even though this was some of the most difficult classes I have taken, it was very interesting. Dr. Dillon did a great job of effectively delivering material and helping students. This class seems very beneficial with an obvious practical application.
- Great class. Wonderful job teaching. Helping my own farm finances. Thank you!!!
- I thought the class was taught well.
- Good class, really enjoyed it!
- The teacher was very informed on up to date topics. He is truly a Ph.D. at heart.
- The class was taught in a very effective manner and was easy to learn. Instructor had good knowledge of material.
- Great class. Homework and lab helped me in understanding subject material.
- Thought you taught material very well. Easy to talk to you about problems on work.
- Dr. Dillon presented coursework in a manner that was understandable, even for those of us who just transferred into Ag.
- Very positive teaching, even if answer was wrong, tried to make it sound right.
- Dr. Dillon is very enthusiastic about his work.
- The instructor presented material in an effective, highly organized manner and returned assignments promptly. He did an excellent job and should be commended for it.
- Good class. I learned a lot, especially since I don't have a farm background.
- Best class I have had since I've been at UK. He pushed me to do my best.
- Dr. Dillon is a great teacher!!
- Dr. Dillon did a very good job.
- I enjoyed the class. Dr. Dillon's teaching methods are very effective.
- This class was very organized and I learned a lot in this class. No complaint at all.
- Dr. Dillon is one of the most informative professors I have ever had. I give him an A++! I have learned more in one semester in this College and class than I learned in all other semesters.

#### AEC 580

- Flexible and respectful of our interests and needs as graduate students, very willing to help outside of class. High level of expectations.
- Excellent teacher and course. Described all the elements of the course fairly and returned assignments quickly.

- Well organized with deadlines, expectations, and feedback. Very knowledgeable and passionate about the subject.
- Finds ways to relate to his students and encourages their participation in class and to work towards their passion.
- Thank you for always being available to help with models. This really showed you cared about the outcome for the student.
- Dr. Dillon is an excellent professor and I would sincerely consider taking another Ag Econ course with Dr. Dillon, despite not being an Ag Econ major. He was very approachable, and I think I met with him about every other week to talk about assignments.

#### AEC 661

- Dr. Dillon is awesome! He is very helpful and understanding professor that is aware of students that are lacking in English communication skills. Very helpful on homework and answering questions in class, like the seminar he hosted for the class before we start doing homework using the software we have heard of. Would make the class more interesting if more examples (practical example) are being used in risk programming. A++Class!
- It's a very interesting course and I really learn a lot in this lecture.
- This course is very helpful in reinforcing the understanding of economic principles, and a lot of topics were discussed.
- Homework helped to learn and master material although they keep students very busy. Also homework related to other fields of agricultural economics can be useful to illustrate the use of the material.
- I like the instructor's teaching style and learned a lot from the class and exercises.
- Slides and assignments help understand the course; I like the content covered in class.
- We learn connection between economic theory and solving problem based on math programming approach. The way professor conveys information is effective and encouraging.
- Interesting and useful class. Great teacher with gather material. Thanks
- Great class and good opportunity to learn new computer skills (GAMS). Keep up the good work!
- This course provides us a new technique to analyze the data which is interesting. I found this professor cooperative. This will help to design my future research.
- Very good course. Dr. Dillon does a very good job teaching it, and is always ready to help. I think I really got a lot out of this class.
- The greatest strength of instructor is his enthusiasm for the course.
- I felt that the overall class was excellent.
- The instructor's effort in getting me to understand the concepts was outstanding.

#### BAE 599

- Great class, the three teachers system works well for this class.
- Very helpful, I really appreciated it.
- Great
- Dr. Dillon's projects were very interesting and useful.

- No complaints with your section. It really helped that you led us through the assignments. You gave us an idea of what you wanted so we knew what to do.
- Instructor went out of his way to accommodate and help students. Extremely knowledgeable about subject matter.
- The instructor was helpful and covered appropriate material.
- Good teacher! He was very willing to help in/out of class, really cared about students learning. His assignments were very real-life.
- I have only good things to say about Dr. Dillon. Keep up the good work.
- BAE 599 was an excellent intro. to precision ag. The team taught approach allowed the students to benefit from different points of view. Dr. Dillon attended almost all lectures, even when he was not teaching. I think that was very helpful and appreciated. The lecture material was presented in a clear format and assignment reflected the lectures. Dillon was always available outside of class for assistance. I really enjoyed the class and learned a lot. Thanks!!
- Carl, you did well. I like the interdisciplinary approach as well.
- I really enjoyed this class. It has been very beneficial to me. It has allowed me to build on the knowledge I already had and has shown me how it applies to real situations. Being able to work on the exercises during class was very beneficial. The course was extremely well taught.
- You made the material very easy to understand. I like how we talk about the homework (what's expected) before we actually do the questions - it clarifies any problems/questions.
- You made the class very fun/enjoyable. Good job - thanks!
- Great class. The class format, lecture, exercise was beneficial. The notes and access to the website helped. I learned a lot this semester.

#### HON 115

- Professor Dillon is the MAN.
- Dr. Dillon is a great professor who really made this course enjoyable
- Carl Dillon is an amazing instructor for this course. He is encouraging and interested in the subject!
- I really enjoyed this course; challenging in a constructive, positive way.
- It was one of my favorite courses ever.
- Very fun and interesting. Learned a lot about food, choices and health.
- Dr. Dillon is awesome. ☺

#### **RECENT POST-DOCTORAL SCHOLARS AND ASSOCIATES ADVISING**

Jordan Shockley. Post-doctoral Scholar. June 2010 to July 2011.

Jean-Marc Gandonou. Post-doctoral Scholar. August 8, 2005 to December 31, 2007.

Juma Salim. Post-doctoral Scholar. April 21, 2004 to June 20, 2007.

Baohui Song. Post-doctoral Scholar. July 9, 2006 to July 31, 2007.

Curtis Mahnken. Extension Associate. June 26, 2006 to February 28, 2007.

Sayed Saghaian. Research Scientist II. February 25, 2004 to February 15, 2005.

Murali Kanakasabai. Post-doctoral Scholar. January 1, 2004 to February 20, 2004.

Aslihan Spaulding. Post-doctoral Scholar. March 25, 2002 to August 15, 2003.



## **RECENT GRADUATE STUDENT THESIS ADVISING:**

- Stull, Jeremy. *Using Kentucky GPS Data in the Decision-making Process for Conservation Reserve Program (CRP) Filter Strip Enrollment*. M.S. 2000.
- Coffey, Brian. *New Input and Output Risk Management Strategies for Livestock Producers*. M.S. 2001.
- Powers, Laura. M.S. Coadvisor with Steve Isaacs. 2002. *Use of Yield Monitor Data and Risk Assessment for Identification of Land Suited for Removal from Production*.
- Kanakasabai, Murali. Ph.D. 2003. *Essays on Farm Adaptation to Climatic Change*.
- Gandonou, Jean-Marc. Ph.D. 2005. *Precision Agriculture and Risk Management*.
- Kayrouz, Ben. M.S. 2008. *Precision Agriculture: Realizing Increased Profit and Reduced Risk through Cost Map and Lightbar Adoption*.
- Vassalos, Michael. M.S. 2008. *Common Agricultural Policy, Greek Agriculture and Multifunctionality*.
- Shockley, Jordan. Ph.D. 2010. *Whole Farm Modeling of Precision Agriculture Technologies*.
- Vassalos, Michael. Ph.D. 2013. *Essays on Fresh Vegetable Production and Marketing Practices*.
- Brown, Rachael. M.S. 2013. *Economic Optimization and Precision Agriculture: A Carbon Footprint Story*.
- Osborne, Will. M.S. 2013. *Improving Farm Management Decisions by Analyzing Production Expenditure Allocations and Farm Performance Standing*.
- Shi-Kwan, Tan. 2013. M.S. Non-thesis Plan B option.

## **RECENT GRADUATE STUDENT THESIS COMMITTEES:**

- Bazen, Ernie. Ph.D. 2001.
- Subramaniam, Vijay. M.S. 2001.
- Miriti, M'Kiara Kimathi. Ph.D. 2003.
- Burdine, Kenneth. M.S. 2003.
- Bendall, Gareth. Ph.D. Mathematics. 2003.
- Ward, Jason. M.S. Biosystems & Agricultural Engineering. 2003.
- Courtney, Cameron. M.S. Biosystems & Agricultural Engineering. 2003.
- Fulton, John. Ph.D. Biosystems Agricultural Engineering. 2003.
- Higgins, Steve. Ph.D. Agronomy. 2004.
- Leiva, Akssell. Ph.D. 2005.
- Eldridge, R.W. M.S. 2005.
- Sisk, Lee. M.S. Biosystems & Agricultural Engineering. 2005.
- Ostemeier, Rick. M.S. 2006.
- Duguid, Kathryn. M.S. Biosystems & Agricultural Engineering. 2006.
- Shockley, Jordan. M.S. 2007.
- Jia, Haili. Ph.D. 2008.
- Wu, Qun. Ph.D. Finance. 2008.
- Burdine, Kenny. Ph.D. 2011.
- Chen, Dennis. Ph.D. Business Administration – Supply Chain Management. 2012.

Zandonadi, Rodrigo. Ph.D. Biosystems & Agricultural Engineering. 2012.  
Yang Yang. Soil Science. Ph.D. 2014.  
Sene, Seydina. M.S. 2014.

#### **RECENT UNDERGRADUATE ADVISING:**

Advising of about 12-18 students prior to serving as AEC Director of Graduate Studies

#### **RECENT SENIOR SEMINAR AND INTERNSHIP STUDENT ADVISING:**

Advising of 15 Senior Seminar research papers and several student internships.

### **PROFESSIONAL RECOGNITION AND SERVICE**

#### **HONORS AND AWARDS:**

##### Professional

Distinguished Professional Contribution Award, Southern Agricultural Economics Association, with S. Saghaian, 2007

University of Kentucky College of Agriculture Wethington Award 2006 and 2008.

University of Kentucky Ken Freedman Outstanding Advisor Award, Faculty Advisor 2005

University of Kentucky College of Agriculture Faculty Futures Award 2005.

Faculty Advisor and Mentor to Jason Hartell, 2004. Graduate Student Paper Distinguished Professional Contribution Award of the Southern Agricultural Economic Association entitled "Pricing Benefit Externalities of Soil Carbon Sequestration in Multifunctional Agriculture"

Faculty Advisor and Mentor to Brian Coffey, 2001. Graduate Student Paper Distinguished Professional Contribution Award of the Southern Agricultural Economic Association entitled "An Analysis of the Effects of Feed Ingredient Price Risk on the Selection of Minimum Cost Backgrounding Feed Rations"

Arkansas Chapter Gamma Sigma Delta Teaching Award of Merit, Dale Bumpers College of Agricultural, Food and Life Sciences, 1997

Faculty Advisor and Mentor to Daniel M. Settlage, 1997. Second Place Student Paper Competition of the Student Section of the American Agricultural Economic Association entitled "Exploring Arkansas Soybean Production Risk Reduction Afforded by the Market Mechanism"

Who's Who Among America's Teachers, 1996

Honorary State Farmer Degree, 1994, Arkansas FFA Association

University of Arkansas Department of Agricultural Economics and Rural Sociology  
Nominee for the 1994, 1995 and 1996 Arkansas Chapter Gamma Sigma Delta  
Teaching Award

Faculty Advisor, Team Coach and Mentor of the 1993 National Championship  
Academic Bowl Team of the Student Section of the American Agricultural  
Economics Association from the University of Arkansas

Editorships, review panels, reviewer service:

USDA ARS National program review for Modeling and Decision Systems

Associate editor of Precision Agriculture (the leading scientific journal in this area of  
research) 2008 – Present

Member of Scientific Committee for 9<sup>th</sup> *European Conference on Precision Agriculture*

Associate editor (as a representative of the American Agricultural Economics  
Association) for farm management and production economics submissions to the  
*Agronomy Journal* which functioned as a multidisciplinary journal of the AAEA  
and other associations. 2005-2008

Reviewer for special edition of *Computers and Electronics in Agriculture*, Volume 58,  
Issue 1, August 2007, entitled “Precision Agriculture in Latin America”

Reviewer (journal manuscripts, selected papers, research proposals, etc. for several  
journals/organizations including AAEA, SAEA)

Graduate

Texas A&M University Nominee for AAEA (American Agricultural Economics  
Association) Outstanding Dissertation Award, Gamma Sigma Delta Agricultural  
Honor Society, Texas A&M University Department of Agricultural Economics  
Graduate Student Association M.S. Senator

Undergraduate

Graduated Summa Cum Laude (4.00 GPA) and with Honors in Agricultural Business,  
Outstanding Agricultural Business Student, National Dean's List, Who's Who  
Among Students in American Colleges and Universities, Alpha Chi Honor  
Society, National Golden Key Honor Society, Delta Tau Alpha Agricultural Honor  
Society Chapter President, World Agricultural Service Society Charter Member  
and Chapter Vice-President, Sam Houston Agricultural Business Club, Collegiate  
FFA

## **MEMBERSHIPS:**

American Agricultural Economics Association  
Southern Agricultural Economics Association  
Western Agricultural Economics Association  
Gamma Sigma Delta  
Charter Member International Society of Precision Agriculture

## **RECENT SERVICE:**

Professional Organizations – Editorships listed above, Southern Agricultural Economics Association Selected Papers Co-chair (2007), Southern Agricultural Economics Association Topic Editor (2004, 2008), Southern Agricultural Economics Association Student Affairs Committee Chair (1999-2000), Reviewer (journal manuscripts, selected papers, posters for several journals/organizations including AAEA, SAEA), Session Moderator and Organizer

University – University Appeals Board (1999-2002), Mathematical Economics Program Review Committee (2008), Academic Advisory Committee for the Social Sciences (2011-2013)

College – Undergraduate Curriculum Committee (2006-2009), Review Team of Department of Agricultural Economics (2003), Scholarship Review (Various Years), Precision Agriculture Steering Committee (1999-2005), New Crops Opportunities Steering Committee (2004-2007), Kentucky Farm Business Management “Futuring” Committee (2003), Kentucky Agricultural Experiment Station Project Review Committee (1999-2002), Gamma Sigma Delta Secretary (1999), Gamma Sigma Delta Auditing Committee Chair (2000-2002)

Department – Undergraduate Program Committee Chair (2006-2008), Undergraduate Program Committee (2004-2005, 2008-2010), Strategic Plan Committee (2004), Research Committee Chair (1999-2003), Graduate Committee (1999-2000, 2001-2002, 2011-2014 including current training for Director of Graduate Studies), Support Committee Chair (2013-2014), Kentucky Farm Business Management Board of Directors Faculty Representative (2005-2007), Mentoring Committees (Anderson, Brown, Burdine, Halich, Ibendahl, Katchova, Mark, Pushkarskaya, Stowe), Strategic Review Committee (2011), Various Search Committees and Search Committee Chair

Administrative – *Director of Undergraduate Studies*, including initial period as Interim (2006-2008), Executive Committee (1999-2003, 2006-2008, 2013-2014)

## **EXTENSION RELATED ACTIVITIES:**

**Dillon, C.** Retirement Portfolio Planning for Farmers Workshops. April 27, 2009; June 11, 2009.

**Dillon, C., T. Stombaugh, S. Isaacs and J. Salim.** Farmers’ Training Workshops on Precision Agriculture Decision Aids for Risk Reduction, Kentucky. December 12-13 and 19-20, 2005; January 9-10, 2006.

More than 80 deliverables including publications, presentations, posters and software development resulting from numerous collaborative efforts with extension faculty reflecting an extension of applied research (all cited above)

Several extension presentations including Princeton Field Day, Lexington Field Day, Kentucky Youth Seminars, Small Grains Research Group Conference, Economic Subject Matter Meetings and Agribusiness Outlook (moderated), etc.

Invited presentation at the Kentucky Precision Agricultural Network meeting

Active involvement in the Kentucky Farm Business Management (KFBM) Program providing input to the program as well as using data for research which has supported many of the above cited articles, posters or presentations and articles