# Jordan M. Shockley, Ph.D.

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## EXPERIENCE

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|---|---|
| 07/2020-Present | **Associate Extension Professor**, **University of Kentucky**, Department of Agricultural Economics, DOE (average) 89.25% Extension/10.75% Teaching |
| 07/2015-07/2020 | **Assistant Extension Professor**, **University of Kentucky**, Department of Agricultural Economics, DOE (average) 89.25% Extension/10.75% Teaching |
| 08/2011-04/2015 | **Agricultural Economics Analyst: Global Licensing and Business Development**, BP Biofuels North America, LLC. |
| 05/2010-08/2011 | **Post-Doctoral Scholar**, **University of Kentucky**, Department of Agricultural Economics |
| 08/2010-12/2010 | **Teaching Assistant, University of Kentucky**, Department of Agricultural Economics |
| 08/2007-05/2010 | **Ph.D. Research Assistant, University of Kentucky**, Department of Agricultural Economics |
| 08/2005-05/2007 | **M.S. Research Assistant, University of Kentucky**, Department of Agricultural Economics |

## EDUCATION

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| 05/2010 | **Ph.D., University of Kentucky**, Lexington, KY, in Agricultural Economics, Chair: Carl Dillon<br>Dissertation: Whole farm modeling of precision agricultural technologies. |
| 05/2007 | **M.S., University of Kentucky**, Lexington, KY, in Agricultural Economics, Chair: Sayed Saghaian<br>Thesis: A logit analysis of precision agriculture adoption in Kentucky. |
| 05/2005 | **B.A., University of Kentucky**, Lexington, KY, in Mathematical Economics |

## EXPERTISE

Farm Management, Poultry Economics, Production Economics, Agricultural Finance, Mathematical Programming

## AWARDS

- 2020 Southern Agricultural Economics Association (SAEA) Extension Program Team Award
- 2019 Outstanding New Extension Faculty Award from the Kentucky Association of State Extension Professions (less than 5 years of service in Cooperative Extension)
- 2018 Gold Quill Award for top journal article from the American Society of Farm Managers and Rural Appraisers

## EXTENSION PUBLICATIONS

(* denotes graduate student)

### Refereed (Numbered) Extension Publications and Decision Tools

1. **Shockley, J.M.** "Economic Costs for Baling Wheat Straw" AEC 2018-10. April, 2019. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extBaleStraw47.xlsx
2. Butler, A.*, **J.M. Shockley**, S. McNeill, and T. Davis. "Post-Harvest Management: The Economics of Grain Drying." AEC 2018-1. April 2018. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extGrainDry43.pdf
3. Halich, G. and **J.M. Shockley.** "Chapter 9: Economics of Production" in Comprehensive Soybean Management Guide. ID-249. May 2018. Available Online: http://www2.ca.uky.edu/agcomm/pubs/ID/ID249/ID249.pdf
4. Williams, B., A. Smith, and **J.M. Shockley** "Things to Consider When Trying to Weather the Storm." In: Surviving the Farm Economy Downturn by the Southern Extension Committee. Southern Extension Risk Management Education Center and USDA-NIFA Publication Series. December 2017. Available Online: https://afpc.tamu.edu/extension/resources/downturn-book/?fbclid=IwAR1Gyp7KwF5TuURUsfO3q5seyiSyoHyQ8V1zD34lBr9Ygr1qZVmmFdxoekw
5. **Shockley, J.M.** and T. Mark. "Days Suitable for Fieldwork in Kentucky." AEC-101 August 2017. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extSFW32.pdf
6. **Shockley, J.M**. "Post-Harvest Management: The Economics of Grain Transportation." AEC-100 October 2016. Available Online: http://www2.ca.uky.edu/agcomm/pubs/AEC/AEC100/AEC100.pdf
7. **Shockley, J.M**, E. Ritchey, and J. McGrath. "Economic Value of Poultry Litter Tool: Pasture, Hay, and Silage." AEC 2016-14. August 2016. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extPLtoolPasture25.xlsx
8. **Shockley, J.M**, E. Ritchey, and J. McGrath. "Economic Value of Poultry Litter Tool: Grain Crops." AEC 2016-13. July 2016. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extPLtoolGrain48.xlsx
9. **Shockley, J.M**, S. McNeill, and J. Dvorak. "Grain Hauling Decision Guide." AEC 2016-11. April 2016. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extGrainHaul36.xlsx
10. Halich, G., **J.M. Shockley**, S. Kindred, and K. Pulliam. "Kentucky ANR Agent Land Value and Cash Rent Survey." AEC 2015-20. February 2016.

**Digital Extension Publications and Decision Tools**

1. **Shockley, J.M.** and R. Ellis*. "Economic Costs for Establishing and Terminating Cover Crops." June, 2019. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extCoverCrop08.xlsx
2. Shepherd, J.*, **J.M. Shockley**, T. Davis, G. Halich, A. Davis, S. Isaacs, J. Pierce, S. Bowker, and K. Burdine. "Resources Available to Farmers Struggling with Farm Financial Stress." April, 2019. Available Online: http://agecon.ca.uky.edu/files/resources_for_farm_financial_challenges_ukaec.pdf
3. Dvorak, J, **J.M. Shockley**, R. Mason, and S. McNeil. "Best Bean Buyer" Mobile App. Available on Android and Apple devices. Updated September 1, 2018.
4. **Shockley, J.M.** "Mobile Apps in Agricultural Economics". November, 2017. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extAgEconApps56.pdf
5. **Shockley, J.M.** "Mobile Apps in Agricultural Economics - Summary". November, 2017. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extAgEconApps56.pdf
6. **Shockley, J.M.** "Best Bean Buyer App Tutorial" YouTube Video 8:44. Published by UK College of Agriculture, Food, and Environment on October, 2017. https://www.youtube.com/watch?v=2KvGAy-B5LE&feature=youtu.be
7. Dvorak, J., **J.M. Shockley**, R. Mason, and S. McNeil. "Best Bean Buyer" Mobile App. Available on Android and Apple devices. Original Released September, 2017.
8. **Shockley, J.M.** "Economic Resources for Improved Decision-Making" July, 2017. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extImprovDec22.pdf
9. **Shockley, J.M.** "Kentucky Grain Markets Map" July, 2016. Available Online: https://drive.google.com/open?id=1nUoO2dd8NCFtNLAlz4QXZoh_mnQ&usp=sharing
10. Halich, G. and **J.M. Shockley**. "Sorghum-Corn Comparison Budget 2016" April 2016. Available Online: http://www.uky.edu/Ag/AgEcon/pubs/extsorghumcorn201630.xlsx

**Trade Publications, Newsletters, Popular Press, Media, Etc.**

1. *Economic and Policy Update*. Authored 22 unique articles from July 2015 – June 2020. Topics include post- harvest management, poultry economics, soil quality and fertility economics.
2. **Shockley, J.M.**, K. Burdine, J. Maples, D. Anderson, J. Benavidez, C. Martinez, A. Griffin. 2020. "Meat Market Minutes: Poultry" YouTube Video 13:33. Published by Agricultural & Resource Economics at the University of Tennessee Institute of Agriculture on May 10, 2020. https://www.youtube.com/watch?v=15C3Sbw9WeA&app=desktop
3. **Shockley, J.M.** 2020. Podcast with Paul Goeringer. *Maryland Risk Management Education Podcast*. "COVID-19 and Poultry Markets". April 27, 2020. Available Online: http://hwcdn.libsyn.com/p/b/e/a/beacc2b88ec0a54f/Shockley_interview_poultry_-_42620_11.49_AM.m4a?c_id=71089766&cs_id=71089766&expiration=1589229363&hwt=ca6ea2f46ccd4d532bbc9fc8db3ed616
4. **Shockley, J.M.** 2020. Interview by Janet Patton. *Lexington Herald-Leader*. "Meat is Still Scarce in Kentucky stores. And it won't be Getting Any Better." April 18, 2020.

5. Kantrovich, Adam, J.C. Hobbs, D. Farnsworth, **J.M. Shockley,** D. Anderson, C. Martinez, J. Jones. 2020. "COVID-19 Related Legislation: Labor, Families First Act, CARES Act." YouTube Video 1:34:05. Published by the Southern Extension Economics Committee on April 17, 2020. https://www.youtube.com/watch?v=mwWrpop_Ee4&t=4s
6. **Shockley, J.M.** 2019. Interview by Gil Gullickson. *Successful Farming.* "How Automated Guidance Changed Farming" December 2, 2019. Online: https://www.agriculture.com/crops/how-automated-guidance-changed-farming
7. **Shockley, J.M.** 2018. Interview by Stu Johnson. *WEKU Radio.* August 30, 2018. Available Online: http://www.weku.fm/post/future-autonomous-farming-kentucky
8. **Shockley, J.M.**. "Economic Opportunities in Baling Wheat Straw" YouTube Video 12:27. Published by UK College of Agriculture, Food, and Environment on May 21, 2018. https://www.youtube.com/watch?v=qjD3KH2F8Sk&feature=youtu.be
9. **Shockley, J.M.** "Economics of Baling Wheat Straw." *Wheat Science Newsletter*, University of Kentucky Cooperative Extension Service, Volume 22;1, April 2018.
10. **Shockley, J.M.** 2017. Interview by Mike Feldhaus. *Across Kentucky Radio.* Kentucky Farm Bureau. October 23, 2017. Available Online: https://cdn.kyfb.com/KYFB/assets/File/Federation/Across%20Kentucky/2017/October/AK_Oct_23_2017_mixdown.mp3
11. **Shockley, J.M.** "UK Poultry Litter Forum" YouTube Video, 1:14:16. Posted by "Kentucky Soybean Board," January 27, 2017. https://www.youtube.com/watch?v=GSuzNJHSEp4&feature=youtu.be
12. **Shockley, J.M.** 2016. Precision agriculture economics and decision making—beyond profitability. *Crops and Soils Magazine*. American Society of Agronomy. doi:10.2134/cs2016-49-0604.
13. **Shockley, J.M.** "Determining the Economic Value of Poultry Litter." *Cheeps & Chirps…Points for Poultry Profitability*, University of Kentucky and Kentucky Poultry Federations, Volume 9, Issue 1, March 2016.
14. Ritchey, E., J. McGrath, and **J.M. Shockley**. "How Does the Value of Poultry Litter Compare to Commercial Fertilizer?" *Forage News*, University of Kentucky Cooperative Extension Service, April 2016.
15. **Shockley, J.M.** 2016. Interview by Camille Lambert. *AGLIFE*. Episode no. 209, first broadcast 8 April 2016. Executive producers are Brent Butler and Neil Kellen. Available Online: https://www.youtube.com/watch?v=G1nlhs6qSlY&feature=youtu.be
16. **Shockley, J.M.** 2016. Interview by Camille Lambert. *AGLIFE*. Episode no. 207, first broadcast 19 March 2016. Executive producers are Brent Butler and Neil Kellen. Available Online: https://www.youtube.com/watch?v=wQ8ZyP4V26Y

*Cited in Popular Press by: Successful Farmer, MidAmerica Farmer Grower MAFG, Kentucky Soybean Sentinel, AgWeb, AgFax, Morning Ag Clips, KYCorn Connection, Agriculture Outlook for The Paducah Sun, Kentucky New Era, Messenger-Inquirer, Oregon Seed Magazine, Southeast FarmPress, The Lane Report*

**Website, Blog Posts and Social Media**

1. **Shockley, J.M.** "Maximizing Value: Spring Application of Broiler Litter for Grain Crop Production" Web blog post. KyGrains.info, March 29, 2019.

2. **Shockley, J.M.** "Economics of Baling Wheat Straw" Web blog post. KyGrains.info March 27, 2018. (former Grain Crops Update)
3. **Shockley, J.M.** "Determining the Economic Cost for Drying and Storing Corn this Season" Web blog post. KyGrains.info August 25, 2017. (former Grain Crops Update)
4. **Shockley, J.M.** "Decision Tools for Hauling Grain to Market" Web blog post. *Grain Crops Update*. September 12, 2016.
5. Facebook (207 followers) and Twitter (284 followers) accounts for providing information to stakeholders around the state. June 25, 2019.

## REFEREED JOURNAL ARTICLES

(* denotes graduate student)

***For Comparison: The American Journal of Agricultural Economics (the top journal in our discipline) has a 5 year Impact Factor = 2.43***

1. Bradley, Carl, R.C. Kenimer, **J.M. Shockley**, and K.A. Wise. "Effect of benzovindifluphyr + propiconazole fungicide applied at different growth stages on foliar disease severity, grain yield, and economic benefit of hybrid corn grown in Kentucky. *Plant Health Progress* Accepted 4/13/2020.
2. **Shockley, J.M**., T. Mark, K. Burdine, and L. Russell. "Financial Implications from Contracting Avian Influenza in a U.S. Broiler Operation". *Journal of Applied Farm Economics* 3, no. 1 (Spring 2020). Available Online: https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1034&context=jafe
3. Brown, R., N. Zau, **J.M. Shockley,** S. Buck. "The Project Manager / Private Contractor Approach to Group Assignments" *Applied Economics Teaching Resources* (2019) Vol. 1, Issue 2: 64-73. Available Online: https://www.aaea.org/publications/applied-economics-teaching-resources/volume-1-issue-2-december-2019
4. Brown, R., N. Zau, **J.M. Shockley,** S. Buck. "An Authentic Learning Approach to Group Assignments: An Analysis of Student Attitudes" *Applied Economics Teaching Resources* (2019) Vol. 1, Issue 2: 1-13. Available Online: https://www.aaea.org/publications/applied-economics-teaching-resources/volume-1-issue-2-december-2019
5. Langemeier, M. and **J.M. Shockley**. 2019. "Impact of Emerging Technologies on Farm Management." *Choices.* Quarter 2. Available Online: http://www.choicesmagazine.org/choices-magazine/theme-articles/the-future-of-farm-management-extension/impact-of-emerging-technology-on-farm-management
6. **Shockley, J.M**., C.R. Dillon, and S.A. Shearer. "An Economic Feasibility Assessment of Autonomous Field Machinery in Grain Crop Production." *Precision Agriculture* (2019) DOI: 10.1007/s1119-019-09638-w. (impact factor = 2.43)
7. Dvorak, Joseph, **J.M. Shockley**, Ricky Mason*, and Samuel McNeil. "Modelling the Costs Associated with High-Moisture Grain for Mobile Apps". *Computers and Electronics in Agriculture* 153 (2018): 313-317. (impact factor = 2.42)

8. **Shockley, J.M.**, Joseph Dvorak, Ricky Mason*, and Samuel McNeil. "The Process and Lessons Learned from Developing a Farm Management Mobile App – A Case Study of Grain Transportation". *2018 Journal of Farm Managers and Rural Appraisers*. (2018): 68-89.
    a. 2018 Gold Quill Award winner for top journal article by the American Society of Farm Managers and Rural Appraisers
9. **Shockley, J.M.**, W.A. Osborne*, C.R. Dillon, J.S. Pierce. "A Two-Tiered Benchmarking Analysis for Cost Management." *2016 Journal of the American Society of Farm Managers and Rural Appraisers*. (2016): 102-115.
10. 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* (2015) DOI: 10.1080/21606544.2015.1090932.

*Prior to current appointment*

11. **Shockley, J.M**., C.R. Dillon, T. Stombaugh, and S. Shearer. "Whole Farm Analysis of Automatic Section Control for Agricultural Machinery." *Precision Agriculture.* 13, 4 (2012): 411-420. (impact factor = 2.24)
12. **Shockley, J.M**., C.R. Dillon, and T. Stombaugh. "The Influence of Auto-steer on Machinery Selection and Land Acquisition." *2012 Journal of the American Society of Farm Managers and Rural Appraisers* (2012): 1-7.
13. Dillon, C.R. and **J.M. Shockley**. "The Value of Suitable Working Time for Crop Production Machinery Activities." *Journal of International Farm Management* Vol.5. Ed.4 (June 2011).
14. **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, (February 2011): 57-75.

## BOOK CHAPTERS

1. Griffin, T.W., **J.M. Shockley**, and T. Mark. 2018. Economics of Precision Farming. In D.K. Shannon, D.E. Clay, N.R. Kitchen, editors, Precision Agriculture Basics, ASA, CSSA, and SSSA, Madison, WI. doi:10.2134/precisionagbasics.2016.0098.
2. Dillon, C.R., **J.M. Shockley** and J.D. Luck. A Spatial Economics Decision-making Guide for Conservation Reserve Program. Chapter 14, pp 245-257. IN: T. Mueller and G. Sassenrath, eds. *GIS Applications in Agriculture, Volume 4: Conservation Planning*. CRC Press, Boca Raton, FL (2015).

## OTHER REFEREED ARTICLES

1. **Shockley, J.M**., T. Mark, and C.R. Dillon. "Educating Producers on the Profitability of Precision Agriculture Technologies." *Advances in Animal Biosciences: Precision Agriculture (ECPA) 2017.* 8:2, (2017). DOI: 10.1017/S2040470017000759

*2.* Dillon, C.R., **J.M. Shockley**, and T. Mark. "The Sensitivity of Economic Gains from High-Speed Planting." *Advances in Animal Biosciences: Precision Agriculture (ECPA) 2017*. 8:2, (2017). DOI: 10.1017/S2040470017001169.

*Prior to current appointment*

3. **Shockley, J.M.,** C.R. Dillon, and T. Stombaugh. "Auto-Steer Navigation Profitability and its Influence on Management Practices: A Whole Farm Analysis." In: *Proceedings of the 7th European Conference on Precision Agriculture*. Wageningen, Netherlands. July 6-8, 2009 pp.751-757.
4. **Shockley, J.M.,** S.H. Saghaian, and C.R. Dillon. "Precision Agriculture Adoption and the Optimal Location of Technology Providers in Kentucky." In: *Proceedings of the 6th European Conference on Precision Agriculture*. Skiathos Island, Greece. June 3-6, 2007. 769-773.

## MANUSCRIPTS IN PROGRESS

1. Martin, Ben*, T. Mark, **J.M Shockley**, and Todd Davis. "Determinants of Firm-Level Food Corn Contract Decisions".
2. Wade, S.*, **J.M. Shockley**, C. Dillon, J. McGrath. "Evaluating the Profitability of Poultry Litter Sub-Surfer Technology".
3. **Shockley, J.M.** and C. Dillon. "An Economic Analysis of Large Autonomous Field Machinery in Grain Crop Production."
4. Dillon, C., **J.M. Shockley**, T. Mark. "The Sensitivity of Economic Gains from High-Speed Planting"
5. Dillon, C., **J.M. Shockley**, T. Mark. "Break-even Analysis for the Precision Agriculture Adoption Decision-making Process."

## PEER REVIEW REFEREE SERVICE (JOURNALS AND GRANTS)

- AAEA – Agribusiness Economics & Management Section
- Journal of Agricultural and Applied Economics
- Precision Agriculture
- Agricultural Finance Review
- Choices
- USDA/NIFA Small Business Innovative Research Program Grant review panel

## PROFESSIONAL AND PEER PRESENTATIONS

(* denotes graduate student; underline denotes poster)

### International Professional and Peer Audiences

1. **Shockley, J.M.**, C. Dillon, and T. Mark. "Autonomous Machinery: Where We Are in the U.S., Where We Are Heading, and Economic Methods for Evaluating Profitability and Risk." *INFER Workshop on Agri-Tech Economics*, Newport, U.K. October 18-19, 2019.
2. **Shockley, J.M.** and C. Dillon. "An Economic Feasibility Assessment for Adoption of Autonomous Field Machinery in Row Crop Production." Selected Paper prepared for presentation at the *2018 International Conference on Precision Agriculture*, Montreal, Quebec. June 24-26, 2018.
3. Cullop, J., G. Ibendahl, **J.M. Shockley**, E. Barnes, and J. Devine, T. Griffin. "Feasibility of Swarm Bot Technology within U.S. Cotton Harvesting" Poster presented at the *2018 International Conference on Precision Agriculture*, Montreal, Quebec. June 24-26, 2018.
4. **Shockley, J.M**., T. Mark and C. Dillon. "Educating Producers on the Profitability of Precision Agriculture Technologies." Selected Paper prepared for presentation at the *11th European Conference on Precision Agriculture*, Edinburgh, Scotland, July 17-20, 2017.

*Prior to current employment*

5. Dillon, C.R. and **J.M. Shockley.** 2010. "Precision Management for Enhanced Farmer Net Returns with the Conservation Reserve Program." Selected Paper prepared for presentation at the *10th International Conference of Precision Agriculture and Other Precision Resource Managemen*t ASA/SSA/CSSA, Denver, CO.
6. Balkcom, K., B. Ortiz, **J.M. Shockley**, and J. Fulton. 2010. "Profitability of RTK Auto-Steer Guidance and its Influence of Peanut Production: A Whole Farm Analysis" Selected Paper prepared for presentation at the *10th International Conference of Precision Agriculture and Other Precision Resource Management* ASA/SSA/CSSA, Denver, CO.
7. **Shockley, J.M.,** C.R. Dillon, and T. Stombaugh. "Auto-Steer Navigation Profitability and its Influence on Management Practices: A Whole Farm Analysis." Selected Paper prepared for presentation at the *7th European Conference on Precision Agriculture*. Wageningen, Netherlands. July 6-8, 2009.
8. **Shockley, J.M**., C.R. Dillon, and S. Shearer. 2008. "Cost Savings for Multiple Inputs With Swath Control and Auto-Guidance Technologies." Selected Paper prepared for presentation at the *9th International Conference of Precision Agriculture and Other Precision Resource Management* ASA/SSA/CSSA, Denver, CO.
9. **Shockley, J.M.,** S.H. Saghaian, and C.R. Dillon. "Precision Agriculture Adoption and the Optimal Location of Technology Providers in Kentucky." Selected Paper prepared for presentation at the *6th European Conference on Precision Agriculture*. Skiathos Island, Greece. June 3-6, 2007.
10. **Shockley, J.M**., S.H. Saghaian, C.R. Dillon, L.J. Maynard 2006. A Logit Analysis of Precision Agriculture Adoption in Kentucky. Selected Paper prepared for presentation at the *8th International Conference on Precision Agriculture and Other Precision Resources Management* ASA/SSA/CSSA, Minneapolis, MN.

**Domestic Professional and Peer Audiences**

1. **Shockley, J.M.** "2019 Poultry Outlook" *2019 Southern Outlook Conference*, Atlanta, GA. September 23-25, 2019
2. **Shockley, J.M.** "Autonomous Machinery: Where We Are, Where We Are Heading, and is it Economical?" *2019 Southern Extension Economics Committee Meeting*, Nashville, TN. June 3-5, 2019.
3. Brown, R., N. Zuo, and **J.M. Shockley**. "How Can Authentic Business Models Improve Student Attitudes About Group Assignments?" Selected Paper prepared for presentation at the *2018 Agricultural & Applied Economics Association Annual Meeting*, Washington, D.C. August 5-7, 2018.
4. **Shockley, J.M.**, L. Russell, K. Burdine and T. Mark. "Financial Implications from Contracting Avian Influenza in a U.S. Broiler Operation." *2018 Southern Extension Economics Committee Meeting*, Myrtle Beach, SC. June 11-13, 2018.
5. **Shockley, J.M.** "Current Status of Farm Management in Kentucky and Vision for 2030." *2018 North Central Farm Management Extension Committee Meeting*, Ames, IA. May 16-18, 2018.
6. **Shockley, J.M.** "Economics of Conservation Practices: Kentucky and Beyond" *2018 North Central Farm Management Extension Committee Meeting*, Ames, IA. May 16-18, 2018.
7. Martin, B., T. Mark, T. Davis, and **J.M. Shockley.** "Determinants of Food Corn Contract Volumes." Selected Paper prepared for presentation at the *2018 Southern Agricultural Economics Association Annual Meeting*, Jacksonville, FL. February 4-6, 2018.
8. Wade, S.*, **J.M. Shockley**, C.R. Dillon, and J.M. McGrath. "Evaluating the Profitability and Environmental Impacts of Poultry Litter Sub-Surfer Technology." Selected Paper prepared for presentation at the *2018 Southern Agricultural Economics Association Annual Meeting*, Jacksonville, FL. February 4-6, 2018.
9. Best, S., A. Smith, M. Buschermohle, **J.M. Shockley.** "Analyzing the Impact of Speed and Width on Planter Costs and Risk for Different Field Characteristics and Planting Windows." Poster for the *2018 Southern Agricultural Economics Association Annual Meeting*, Jacksonville, FL. February 4-6, 2018.
10. **Shockley, J.M**. "Farm Management Strategies for Improved Decision-Making: State and Southern Region Efforts." *Agricultural and Applied Economics Association Annual Meeting*, Chicago, IL, July 30- August 1, 2017.
11. **Shockley, J.M**. "Developing a Mobile App to Address Problems in Farm Management." *2017 Southern Extension Economics Committee Meeting*, Charleston, SC, June 26-28, 2017.
12. **Shockley, J.M**. "Applied Research & Extension Activities Pertaining to Precision Agriculture." *2017 North Central Farm Management Extension Committee Meeting*, Manhattan, KS, May 18-19, 2017
13. **Shockley, J.M**. "Extension's Response to Farm Financial Stress." *2017 North Central Farm Management Extension Committee Meeting*, Manhattan, KS, May 18-19, 2017
14. **Shockley, J.M**. "Big Ag Data & Precision Agriculture: What are the Extension, Teaching & Research Needs." Selected Organized Symposium at the *Southern Agricultural Economics Association Annual Meeting*, Mobile, AL, February 4-7, 2017.
15. **Shockley, J.M**. "An Integrated Extension Approach to Poultry Litter Best Management Practices in Kentucky." Selected Paper prepared for presentation at the *2016 Southern Extension Economics Committee Meeting*, Pointe Clear, AL, June 31 – July 2, 2016.

16. Griffin, T and **J. Shockley**. "Farmers' Willingness-To-Pay for Farmland Based on Machinery Efficiency and Precision Technology Adoption." Selected Paper prepared for presentation at the *Southern Agriculture Economics Association Annual Meeting*, San Antonio, TX, February 6-9, 2016.

*Prior to current employment*

17. Brown, R.M., C.R. Dillon, J. Scheiffer, and **J.M Shockley**. "The Impact of Precision Agriculture Techniques on Kentucky Grain Farmers' Carbon Footprint." Selected Paper prepared for presentation at the *Southern Agriculture Economics Association Annual Meeting*, Birmingham, AL, February 4-7, 2012.
18. **Shockley, J.M.**, C.R. Dillon, and T. Woods. "Estimating the Economic Viability of a New Crop Alternative for the U.S. Organic Market: Edamame – A Vegetable Soybean." Selected Poster to be presented at the *Agricultural & Applied Economic Association's 2011 AAEA & NAREA Joint Annual Meeting*, Pittsburg, Pennsylvania, July 24-26, 2011.
19. Dillon, C.R. and **J.M. Shockley**. 2009. "Interactive Effects of Production Practices on Risk Management Potential of Variable Rate Irrigation and Variable Rate Fertilization." Selected Paper prepared for presentation at the *Western Agricultural Economics Association Annual Meetings*, Kauai, HI. June 24-26.
20. **Shockley, J.M**., C.R. Dillon, and S.H. Saghaian. 2007. "Cost Sensitivity Analysis on the Optimal Location of Technology Providers in Kentucky." Selected Paper prepared for presentation at the *Southern Agricultural Economics Association Annual Meetings*, Mobil, AL. February 4 - 7.

## EXTENSION PRESENTATIONS

### National and Regional Extension Audiences

1. **Shockley, J.M.** "Economic Feasibility of Autonomous Vehicles." *The InfoAg Conference*, August 23-25, 2019: St. Louis, MO.
2. **Shockley, J.M**. "Developing a Mobile App to Address Problems in Farm Management" *2019 National Farm Business Management Conference*, Sheboygan, WI. June 9-13, 2019.
3. Ellis, R.* and **J.M. Shockley.** "Economic Costs of Cover Cropping." *Cover Crop Field Day*, March 8th, 2019: Clarksdale, MS.
4. **Shockley, J.M.** "Precision Agriculture Economics and Decision Making – Beyond Profitability." *Delaware Ag Week 2019*, January 15th, 2019: Harrington, DE.
5. **Shockley, J.M.** "Precision Agriculture Economics and Decision Making – Beyond Profitability." *Precision Agriculture Action Summit 2018*, January 16, 2018: Jamestown, ND.
6. **Shockley, J.M.,** Carl Dillon, and Tyler Mark. "The Sensitivity of Economic Gains from High-Speed Planting". *2017 Planter Research Workshop*, November 7-9, 2017: Case IH Headquarters, Burr Ridge, IL.
7. **Shockley, J.M.** "Determining the Economics of Poultry Litter." *Kentuckiana*, November 29-30, 2016: French Lick, IN
8. **Shockley, J.M.** "Determining the Economics of Poultry Litter." *Mid-Atlantic Crop Management School*, November 15-17, 2016: Ocean City, MD

9. **Shockley, J.M.** "Precision Agriculture Economics and Decision Making – Beyond Profitability." *The InfoAg Conference*, August 2-4, 2016: St. Louis, MO.
10. **Shockley, J.M.** "Post-Harvest Management-Economics of Grain Storage and Drying." *Azteca Milling – GRUMA Worldwide Meetings*, February 16th – 18th, 2016: Mt. Carmel, IL; Henderson, KY; Evansville, IN.
11. **Shockley, J.M.** "Precision Agriculture Economics-Beyond Profitability." *John Deere Integrated Solutions Summer Meeting*, July 29th – 30th, 2015: Wilmington, NC.

*Prior to current employment*

12. **Shockley, J.M.** "Economic Issues of Current Precision Agriculture Technologies." Invited presentation at the *2011 National Farm Business Management Conference*, Nashville, Tennessee, June 12-16.

**Kentucky Extension Audiences**

*Summary of Kentucky Extension Presentations*

The follow is the total count (90) of extension-oriented county presentations, field days, in-service agent trainings, etc. that I have conducted within Kentucky for each year in the department. The topics have included the economics of post-harvest management, poultry economics, soil quality and fertility economics, and precision agriculture economics.

| Year of Employment | Presentations Delivered |
|---|---|
| 2019 | 23 |
| 2018 | 24 |
| 2017 | 26 |
| 2016 | 21 |
| 2015 | 10 |

- In addition, 18 farm visits were conducted since beginning in July, 2015 (not included in the numbers presented above)

*Selected Statewide Activities (Sample from the above 104 extension presentation since July, 2015)*

- **Shockley, J.M.** "Farm Management Strategies for Improved Decision Making". *Kentucky Cattleman's Leadership Program*, November 6th, 2019: Bowling Green, KY.
- **Shockley, J.M.** "Economic Costs of Cover Cropping". *2019 Kentucky Agriculture Training School (KATS)*, March 7, 2019: Princeton, KY.
- **Shockley, J.M.** "Economic Costs of Cover Cropping". *2019 Winter Wheat Meetings*, January 8, 2019: Hopkinsville, KY.
- **Shockley, J.M.** "Farm Management Strategies for Improved Decision Making", *2019 Ag Expo*, January 30, 2019: Owensboro, KY.
- **Shockley, J.M.** "Economics of Autonomous Machinery", *2018 Corn, Soybean and Tobacco Field Day*, July 24, 2018: Princeton, KY.

- **Shockley, J.M.** "Economics of Baling Wheat Straw", *2018 Wheat Field Day*, May 8, 2018: Princeton, KY.
- **Shockley, J.*M*.** "Economic Value of Poultry Litter", *2018 Kentucky Poultry Federation Growers Meeting*, April 25, 2018: Summersville, KY.
- **Shockley, J.M.** "Farm Management Strategies for Improved Decision Making." *2018 Kentucky Commodity Conference*, January 19, 2018: Bowling Green, KY.
- **Shockley, J.M.** "The Economic Impact of the Poultry Industry in Kentucky." *2017 Kentucky Farm Bureau Federation Annual Meeting*, November 30th, 2017: Louisville, KY.
- **Shockley, J.M.** "Farm Management Strategies for Improved Decision-Making." *2017 Corn, Soybean and Tobacco Field Day*, July 26, 2017: Princeton, KY.
- **Shockley, J.M. (organizer and moderator)**, Jennifer Rhodes (Delmarva producer), Johnathan Quinn (Delmarva producer), Scott Kueguel (Ohio Valley producer), Jason Head (Ohio Valley producer), Russ Vickers (Ohio Valley producer), and Randy Mann (Ohio Valley producer). "Poultry Litter Lessons from Delmarva and the Ohio Valley." *2017 Ag Expo*, January 25, 2017: Owensboro, KY and January 26, 2017, Hopkinsville, KY.
- **Shockley, J.M.** "Precision Agriculture Economics and Decision Making – Beyond Profitability." *2017 Ag Expo*, January 25, 2017: Owensboro, KY.
- **Shockley, J.M.** "Farm Management Strategies for Improved Decision-Making." *2017 Winter Wheat Meetings*, January 5, 2017: Hopkinsville, KY.
- **Shockley, J.M.** "Economic Value of Poultry Litter", *2016 Corn, Soybean and Tobacco Field Day*, July 28, 2016: Princeton, KY

*Selected In-service County Agent Trainings (Sample from the above 90 extension presentation since July, 2015)*

- **Shockley, J.M.** "Mobile Apps in Agriculture". *2018 ANR East Annual Update*, November 6, 2018: Winchester, KY.
- **Shockley, J.M.** "Best Bean Buyer App Demonstration". *2018 Economic Subject Matter Training*, January 3-5, 2018: Madisonville, KY; Columbia, KY; Winchester, KY.
- **Shockley, J.M.** "Grain Hauling Tool and App Development Update". *2017 Economic Subject Matter Training*, January 11,13,19, 2017: Princeton, KY; Columbia, KY; Winchester, KY.
- **Shockley, J.M.** "Overview of Extension Program and Tools Currently Available for Agents". *2016 ANR West Annual Update*, November 2, 2016: Princeton, KY.
- **Shockley, J.M.** "Overview of Extension Program and Tools Currently Available for Agents". *2016 ANR East Annual Update*, October 26, 2016: Winchester, KY.
- **Shockley, J.M.** "Grain Crops Training: Farm Finance". *2016 Central KY Grain Crops Agent Training*, September 15, 2016: Versailles, KY.
- **Shockley, J.M.** "Economic of Grain Hauling". *2016 Economic Subject Matter Training*, January 6-8, 2016: Princeton, KY; Columbia, KY; Winchester, KY.

## COMPETITIVE GRANTS

### Summary Table of Awarded Competitive Grants

| Description | $ Awarded | $ Appropriated to Shockley | % of Time Committed | Role* | Date |
|---|---|---|---|---|---|
| **USDA-NIFA** | | | | | |
| Cover Crops | $298,112 | $121,005 | 5% | Co-PI* | 2016-19 |
| **IPNI** | | | | | |
| Precision Agriculture | $484,175 | $2,000 | 1% | Co-I* | 2016-19 |
| **SARE** | | | | | |
| Specialty Small Grains | $235,119 | $28,648 | 1% | Co-PI | 2019-22 |
| **NRCS-KY CIG** | | | | | |
| Cover Crops | $75,000 | $2,000 | 4% | Co-PI* | 2016-17 |
| **KY Soybean Board** | | | | | |
| Fertility Recommendations | $34,500 | $1,000 | 1% | Co-PI* | 2020-21 |
| Intensive Management-Yr3 | $62,000 | $1,000 | 1% | Co-PI* | 2018-19 |
| High Yield Management | $34,548 | $500 | 1% | Co-PI* | 2017-18 |
| Intensive Management-Yr2 | $51,424 | $1,000 | 1% | Co-PI* | 2017-18 |
| High Yield Management | $34,888 | $1,000 | 1% | Co-PI* | 2017-18 |
| Mobile App Development | $13,945 | $5,535 | 1% | Co-PI* | 2016-17 |
| Poultry Litter Management | $18,469 | $18,469 | 1% | PI* | 2016-17 |
| **KY Corn Growers** | | | | | |
| Premium Corn | $10,000 | $10,000 | 1% | PI | 2020-21 |
| Nitrogen Management-Yr2 | $100,000 | $2,000 | 1% | Co-PI* | 2019-20 |
| Irrigation Management | $39,875 | $1,000 | 1% | Co-PI* | 2019-20 |
| Nitrogen Management-Yr1 | $88,366 | $2,000 | 1% | Co-PI* | 2018-19 |
| Poultry Litter Management | $18,469 | $18,469 | 1% | PI* | 2016-17 |
| **KY Small Grain Growers** | | | | | |
| Pest Management | $33,750 | $1,000 | 1% | Co-PI* | 2018-19 |
| Specialty Small Grains | $12,500 | $12,500 | 1% | PI | 2018-19 |
| Modern Wheat Nutrition | $25,000 | $1,000 | 1% | Co-PI* | 2020-21 |
| **UK CAFE** | | | | | |
| Travel Grant | $2,500 | $2,500 | - | PI* | 2018-19 |
| **TOTAL** | **$1,672,640** | **$232,626** | | | |

*Served as the only agricultural economist on the grant.

**Detailed Description of Grants Currently Funded: $444,494 (Total)**

Title of Project: Reevaluating the University of Kentucky's Soil Fertility Recommendations for Soybean Production
Source of Support: Kentucky Soybean Promotion Board
Amount Requested: $34,500
Effective and Expiration Dates: 2020-2021
Collaborators: Edwin Ritchey, John Grove, **Jordan Shockley (Co-PI)**, and Josh McGrath

Title of Project: Determining the Profitability of Growing Premium Corn Varieties in Kentucky
Source of Support: Kentucky Corn Growers Association
Amount Requested: $10,000
Effective and Expiration Dates: 2020-2021
Collaborators: **Jordan Shockley (PI)** and Greg Halich

Title of Project: Advancing Modern Wheat Nutrition to Sustain Yield and the Economics of Production
Source of Support: Kentucky Small Grain Growers Association
Amount Requested: $25,000
Effective and Expiration Dates: 2020-2021
Collaborators: John Grove, Edwin Ritchey, and **Jordan Shockley (Co-PI)**

Title of Project: Development of Local Small Grain Value Chains for Kentucky and the Mid-South
Source of Support: Southern Sustainable Agriculture Research & Education (SARE)
Amount Awarded: $235,119
Effective and Expiration Dates: 2019-2022
Collaborators: David van Sanford, Krista Jacobsen, Lilian Brislen, Leigh Maynard, and **Jordan Shockley (Co-PI)**

Title of Project: Nitrogen Rate Decision Support for Kentucky Corn Grain Production
Source of Support: Kentucky Corn Growers Association
Amount Awarded: $100,000
Effective and Expiration Dates: 2019-2020
Collaborators: Joshua McGrath, Hanna Poffenbarger, **Jordan Shockley (Co-PI)**, Michael Sama, Edwin Ritchey

Title of Project: Determining Yield and Profitability of Different Corn Irrigation Strategies
Source of Support: Kentucky Corn Growers Association
Amount Awarded: $39,875
Effective and Expiration Dates: 2019-2020
Collaborators: Carrie Knott, Chad Lee, and **Jordan Shockley (Co-PI)**

**Detailed Description of Grants Completed: $1,227,906 (Total)**

Title of Project: Reducing Fusarium Head Blight Vomitoxin Levels through Agronomic Practices
Source of Support: Kentucky Small Grain Growers Association
Amount Awarded: $33,750
Effective and Expiration Dates: 2018-2019
Collaborators: Katherine Rod, Carrie Knott, Carl Bradley and **Jordan Shockley (Co-PI)**

Title of Project: Market Demand and Production Costs Estimates for Specialty Small Grains in Kentucky
Source of Support: Kentucky Small Grain Growers Association
Amount Awarded: $12,500
Effective and Expiration Dates: 2018-2019
Collaborators: **Jordan Shockley (Lead PI)**, Leigh Maynard and Dave Van Sanford

Title of Project: Increasing Double Crop Soybean Yields through Intensive Management: Year 3
Source of Support: Kentucky Soybean Promotion Board
Amount Awarded: $62,000
Effective and Expiration Dates: 2018-2019
Collaborators: Katherine (McLachlan) Rod, Carrie Knott, Carl Bradley, and **Jordan Shockley (Co-PI)**

Title of Project: Nitrogen Rate Decision Support for Kentucky Corn Grain Production
Source of Support: Kentucky Corn Growers Association
Amount Awarded: $88,366
Effective and Expiration Dates: 2018-2019
Collaborators: Joshua McGrath, Hanna Poffenbarger, **Jordan Shockley (Co-PI)**, Michael Sama, Edwin Ritchey

Title of Project: 2-Day Workshop on AIMMS
Source of Support: University of Kentucky College of Agriculture, Food, and Environment Research Activity Award
Amount Awarded: $2,250
Effective and Expiration Dates: 2018-2019
Collaborators: **Jordan Shockley (Lead PI)**

Title of Project: Quantifying the Agronomic, Economic, and Environmental Benefits of Cover Crops in Mid-South Production Systems
Source of Support: USDA-NIFA Critical Agricultural Research and Education (CARE)
Amount Awarded: $298,122
Effective and Expiration Dates: 2016-2019
Collaborators: Joby Czarnecki, Beth Baker, John Orlowski, **Jordan Shockley (Co-PI)**

Title of Project: Do Critical Phosphorus Concentration Vary in Space and if so Why?

Source of Support: International Plant Nutrition Institute (NPNI) Phosphorus Fellowship Program
Amount Awarded: $484,175
Effective and Expiration Dates: 2016-2019
Collaborators: Joshua McGrath, James Brown, David McNear, Edwin Ritchey, Ole Wendroth, **Jordan Shockley (Co-I)**, Ben Goff, John Spargo, Brain Arnall, Rachel Cook, Steve Culman, Joe Luck, and John Fulton

Title of Project: Understanding the Components and Mechanisms Responsible for High Yielding Soybeans
Source of Support: Kentucky Soybean Promotion Board
Amount Awarded: $34,548
Effective and Expiration Dates: 2017-2018
Collaborators: Edwin Ritchey, John Grove and **Jordan Shockley (Co-PI)**

Title of Project: Quantifying the Potential of 100 Bu/Ac Yield in Soybean and its Profitability for Environmental Conditions in Kentucky
Source of Support: Kentucky Soybean Promotion Board
Amount Awarded: $34,888
Effective and Expiration Dates: 2017-2018
Collaborators: Montserrat Salmeraon, **Jordan Shockley (Co-PI)**, Chad Lee, Carrie Knott, Edwin Ritchey
Title of Project: Intensive Management: An Option to Increase Double Crop Soybean Yields?
Source of Support: Kentucky Soybean Promotion Board
Amount Awarded: $51,424
Effective and Expiration Dates: 2017-2018
Collaborators: Katherine McLachlan, Carrie Knott, Carl Bradley, **Jordan Shockley (Co-PI)**

Title of Project: Nitrogen Contributions from Different Cover Cropping Systems Established Following Full Season Soybeans
Source of Support: Natural Resource Conservation Service, Kentucky Conservation Innovation Grant
Amount Awarded: $75,000
Effective and Expiration Dates: 2016-2017
Collaborators: Edwin Ritchey, Josh McGrath, Brad Lee, Erin Haramoto, Mark Coyne, and **Jordan Shockley (Co-PI)**

Title of Project: Determining the Economic Value of Poultry Litter for Kentucky Corn Producers
Source of Support: Kentucky Corn Growers Association
Amount Awarded: $18,469
Effective and Expiration Dates: 2016-2017
Collaborators: **Jordan Shockley (Lead-PI)**, Edwin Ritchey, and Josh McGrath

Title of Project: High Moisture Soybean Delivery Advice App
Source of Support: Kentucky Soybean Promotion Board
Amount Awarded: $13,945
Effective and Expiration Dates: 2016-2017
Collaborators: Joseph Dvorak, **Jordan Shockley (Co-PI)**, and Sam McNeil

Title of Project: Determining the Economic Value of Poultry Litter for Kentucky Soybean Producers
Source of Support: Kentucky Soybean Promotion Board
Amount Awarded: $18,469
Effective and Expiration Dates: 2016-2017
Collaborators: **Jordan Shockley (Lead-PI)**, Edwin Ritchey, and Josh McGrath

**Detailed Description of Grants Completed Prior to Current Employment: $94,147 (Total)**

Title of Project: Precision Agriculture's Impact on Kentucky Farmers' Carbon Footprint
Source of Support: United States Department of Agriculture. CSREES-Special Grant through Hatch Funds
Amount Awarded: $45,051
Effective and Expiration Dates: 2010-2012
Collaborators: Carl Dillon and **Jordan Shockley (Co-PI)**

Title of Project: Whole Farm Analysis of Edamame Production in Kentucky
Source of Support: United States Department of Agriculture. CSREES-Special Grant through Hatch Funds
Amount Awarded: $49,096
Effective and Expiration Dates: 2009-2012
Collaborators: Carl Dillon and **Jordan Shockley (Co-PI)**

**Detailed Description of Grants in Review: $4,383,928 (Total)**

Title of Project: Developing plans for USDA-certified, custom poultry processing facilities for rural areas in Kentucky
Source of Support: USDA – NIFA
Amount Requested: $499,807
Effective and Expiration Dates: 2020-2023
Collaborators: Tony Pescatore, **Jordan Shockley (Co-PI)**, Morgan Hayes, Gregg Rentfrow, Jacquie Jacobs

Title of Project: Developing strategies to overcome the lack of poultry processing facilities in rural areas to enable producers to supply local poultry meat
Source of Support: USDA – NIFA
Amount Requested: $499,444
Effective and Expiration Dates: 2020-2023
Collaborators: Tony Pescatore, **Jordan Shockley (Co-PI)**, Morgan Hayes, Gregg Rentfrow,

Title of Project: Benchmarking the use of cover crops to increase sustainability and competitiveness of US small and middle-sized farms
Source of Support: USDA – NIFA
Amount Requested: $500,000
Effective and Expiration Dates: 2020-2023
Collaborators: Wei Ren, **Jordan Shockley (Co-PI)**, Brad Lee, Pierre-Andre Jacinthe, and Laura Lindsey

Title of Project: The RAD-P3 Initiative: Robotic engineering, Aerial imaging and Data modeling for the Improvement of Production, Phenology, and Profitability of Root Cropping Systems
Source of Support: USDA – Specialty Crop Research Initiative
Amount Requested: $2,227,677
Effective and Expiration Dates: 2020-2024
Collaborators: Carolyn Butts-Wilmsmeyer, Robert Dixon, Kevin Tucker, Randall Pearson, Nima Yagin, Courtney Breckenridge, Elizabeth Wahle, Christopher Topp, **Jordan Shockley (Co-PI)**, Timothy Woods, Tyler Mark, and Olutoyosi Ajayi

Title of Project: A Collaborative Training Approach for Kentucky's Military Veteran, Underserved and Rural Beginning Farmers" proposal submitted by University of Kentucky Cooperative Extension Service
Source of Support: USDA – Beginning Farmer and Rancher Development Program
Amount Requested: $600,000
Effective and Expiration Dates: 2020-2024
Collaborators: Craig Woods, Ricky Yeargan, Linda Bokros, Michael Lewis, Kenny Burdine, **Jordan Shockley (Co-PI)**, Paul Vijayakumar, Shawn Wright, and Edwin Ritchey

Title of Project: Determining Yield and Profitability of Different Corn Strategies: Year 2
Source of Support: Kentucky Corn Growers Association
Amount Requested: $40,000
Effective and Expiration Dates: 2020-2021
Collaborators: Carrie Knott, Chad Lee, and **Jordan Shockley (Co-PI)**

Title of Project: Reducing Fusarium Head Blight Vomitoxin Levels through Agronomic Practices: Data Analysis
Source of Support: Kentucky Small Grain Growers Association
Amount Requested: $17,000
Effective and Expiration Dates: 2020-2021
Collaborators: Katherine McLachlan, Carrie Knott, Carl Bradley, **Jordan Shockley (Co-PI)**

**Detailed Description of Grants Unfunded: $14,327,791 (Total)**

Title of Project: Advancing Modern Wheat Nutrition to Sustain Yield and the Economics of Production
Source of Support: Siemer Milling Endowment Fund
Amount Requested: $25,000
Effective and Expiration Dates: 2019-2020
Collaborators: John Grove, Edwin Ritchey, and **Jordan Shockley (Co-PI)**

Title of Project: Coordinated Soil Test Correlation to Populate "FRST" Database.
Source of Support: The 4R Research Fund
Amount Requested: $1,449,893
Effective and Expiration Dates: 2019-2023
Collaborators: Joshua McGrath, Brian Arnall, Steve Culman, Pete Kleinman, Deanna Osmond, Amir Sadeghpour, Nathan Slaton, Doug Smith, John Spargo, Wade Thomason, Charles White, Joseph Dvorak, John Fulton, Joe Luck, Micheal Sama, **Jordan Shockley (Co-I)**

Title of Project: Overcoming Inefficiencies in the Forage Harvest System for Maximization of Feed Quality and Profitability
Source of Support: USDA-AFRI
Amount Requested: $499,762
Effective and Expiration Dates: 2019-2022
Collaborators: Brian Luck, **Jordan Shockley (Co-PI)** and Mahmoud Sharara

Title of Project: IPM, Soil Management, and Economic Assessments on Slug Outbreaks in Soybean in the Mid-West US
Source of Support: USDA NIFA: Crop Protection and Pest Management
Amount Requested: $324,720
Effective and Expiration Dates: 2018-2020
Collaborators: Raul Villanueva, Edwin Ritchey, **Jordan Shockley**, John Obrycki, Scott Stewart, and Nick Seiter

Title of Project: SMART FARM – Agricultural Water Management for the Right Amount and Quality of Water Entering and Leaving the Farm
Source of Support: USDA AFRI: Water for Food Production Systems
Amount Requested: $4,997,349
Effective and Expiration Dates: 2017-2020
Collaborators: Joseph Dvorak, Michael Sama, Ole Wendroth, Dwayne Edwards, **Jordan Shockley**, Carrie Knott

Title of Project: Quantifying Soybean Yield Potential and Maximum Economic Returns for Environmental Conditions in Kentucky
Source of Support: Kentucky Soybean Promotion Board
Amount Requested: $66,089
Effective and Expiration Dates: 2018-2019
Collaborators: Montserrat Salmeron, **Jordan Shockley**, Chad Lee, Carrie Knott, Edwin Ritchey

Title of Project: Overcoming Inefficiencies in the Forage Harvest System for Maximization of Feed Quality and Profitability
Source of Support: USDA-AFRI
Amount Requested: $499,148
Effective and Expiration Dates: 2018-2021
Collaborators: Brian Luck and **Jordan Shockley**

Title of Project: Computation Skills Development for Next Generation Agriscience Professionals for Sustaining Data Driven Agriculture
Source of Support: USDA-NIFA Higher Education Challenge Grant
Amount Requested: $749,927
Effective and Expiration Dates: 2017-2020
Collaborators: Dharmendra Sarawat, Dennis Buckmaster, Aaron Ault, James Krogmeier, Joseph Dvorak, Tanya Dvorak, **Jordan Shockley**, Michael Sama, Tyler Mark, Ajay Sharda, and Daniel Flippo

Title of Project: CPS: Medium: Enabling Real-Time Analysis of Complex Agricultural Systems using Automated Cyber-Physical Systems
Source of Support: National Science Foundation – Cyber-Physical Systems
Amount Requested: $948,113
Effective and Expiration Dates: 2017-2019
Collaborators: Joe Dvorak, Ben Goff, Tyler Mark, Mike Montross, Michael Sama, Joshua Jackson, Kenneth Burdine, and **Jordan Shockley**

Title of Project: Assessing the Tradeoffs in Quality, Timeliness and Economics between Unmanned Aerial and Ground Platforms in Crop Monitoring
Source of Support: National Science Foundation – National Robotics Initiative
Amount Requested: $628,393
Effective and Expiration Dates: 2017-2019
Collaborators: Joe Dvorak, Ben Goff, Tyler Mark, Mike Montross, Michael Sama, Kenneth Burdine, **Jordan Shockley**

Title of Project: Enabling Beginning Farmers and Veterans to Learn Effective Methods for Successful Farming in Western Kentucky
Source of Support: USDA-NIFA Beginning Farmer and Rancher Development Program
Amount Requested: $599,991
Effective and Expiration Dates: 2017-2019
Collaborators: Raul Villanueva, Edwin Ritchey, Carrie Knott, Winston Dunwell, Carl Bradley, **Jordan Shockley**, Emily Pfeufer

Title of Project: Enhancing the Resiliency of Rural Communities with Transitioning Economics
Source of Support: USDA-NIFA National Feeds Fellowship
Amount Requested: $241,000
Effective and Expiration Dates: 2017-2022
Collaborators: Alison Davis, Yuqing Zheng, Steven Buck, Tyler Mark, J**ordan Shockley**, Michael Reed, William Snell, Yoko Kusunose, Karen Rignall, Tim Woods, Wuyang Hu, Carl Dillon, David Freshwater, and Quinton Tyler

Title of Project: Computation Skills Development for Next Generation Agriscience Professionals for Sustaining Data Driven Agriculture
Source of Support: USDA-NIFA Higher Education Challenge Grant
Amount Requested: $750,000
Effective and Expiration Dates: 2016-2019
Collaborators: Dennis Buckmaster, Aaron Ault, James Krogmeier, Dharmendra Sarawat, Joseph Dvorak, **Jordan Shockley**, Michael Sama, Tyler Mark, and Ajay Sharda

Title of Project: Mapping Yield and Quality in Forage Crops Using Unmanned Platforms
Source of Support: USDA, AFRI
Amount Requested: $500,000
Effective and Expiration Dates: 2017-2019
Collaborators: Joe Dvorak, Michael Sama, Joshua Jackson, Michael Montross, Ben Goff, Tyler Mark, **Jordan Shockley**

Title of Project: Soil Health Synergy: Using Innovative Equipment and Technologies to Improve Soil Health, Increase Nitrogen Use Efficiency, and Reduce Sediment and Nutrient Loss from Grain Production Systems
Source of Support: Natural Resources Conservation Services: Conservation Innovations Grants
Amount Requested: $1,905,705
Effective and Expiration Dates: 2016-2018
Collaborators: Edwin Ritchey, Joshua McGrath, Amy Shober, Forbes Walker, Michael Buschermohle, Don Tyler, Mark Coyne, Erin Haramoto, Brad Lee, A. Lee Myer, **Jordan Shockley**, Fran Sikora, D. Janine Sherrier, Shawn Tingle, Karen Gartley, John Spargo, and L. Duncan

Title of Project: Planning an Integrated Farm Management Program for Enhanced Food Security
Source of Support: USDA, NIFA – Food Security Program
Amount Requested: $142,701
Effective and Expiration Dates: 2015-2017
Collaborators: Carl Dillon, Steve Isaacs, **Jordan Shockley**, and Tyler Mark

## TEACHING EXPERIENCE

To prepare undergraduate students for their professional careers, I developed a unique classroom experience that mimics a real-world job experience in the private sector. In 2015-2016, redesigned and restructured AEC 441G into an innovative Project Manager/Private Contractor (PM/PC) Model where project management principles were incorporated into the classroom setting to solve group projects. Each project challenges students to solve real-world problems faced by farmers using the financial concepts learned in the classroom. This novel PM/PC model mimics what most students will face when they enter the private sector where salaries, promotions, and success typically depend on the right mixture of self-promotion, strategic thinking, initiative, creativity, and of course hard work. The student evaluations below reflect the success of this new and innovate approach to teaching Agricultural Financial Management.

### Courses Taught at the University of Kentucky

| **Dept. No.** | Course Title | Credit Hours | Enrollment | Value of Course (out of 5) | Quality of Teaching (out of 5) |
|---|---|---|---|---|---|
| **Fall 2019** | | | | | |
| AEC 441G-001 | Agricultural Financial Management | 3 | 25 | 5.00<br>Department – 4.40<br>College – 4.30 | 4.80<br>Department – 4.40<br>College – 4.30 |
| **Fall 2018** | | | | | |
| AEC 441G-001 | Agricultural Financial Management | 3 | 24 | 4.90<br>Department – 4.30<br>College – 4.30 | 4.90<br>Department – 4.40<br>College – 4.40 |
| **Fall 2017** | | | | | |
| AEC 441G-001 | Agricultural Financial Management | 3 | 33 | 4.60<br>Department – 4.30<br>College – 4.20 | 4.60<br>Department – 4.40<br>College – 4.30 |
| **Fall 2016** | | | | | |
| AEC 441G-001 | Agricultural Financial Management | 3 | 27 | 4.88<br>Department – 4.19<br>College – 4.21<br>University – 4.15 | 4.88<br>Department – 4.36<br>College – 4.29<br>University – 4.24 |

### Other Instructional Activities

**Guest Lecture**, University of Kentucky – GEN 100: Issues in Agriculture, Food and Environment, 10-1-2019

**Guest Lecture**, University of Kentucky – AEC 661: Programming Models in Agricultural Economics 9-17-2019

**Guest Lecture**, University of Kentucky – AEC 110: Current Issues in Agricultural Economics, 9-5-2019

**Guest Lecture**, University of Kentucky – AEC 661: Programming Models in Agricultural Economics 11-29-2018

**Guest Lecture**, University of Kentucky – UKC 130: Economics of Food and Agriculture, 9-20-2018

**Guest Lecture**, University of Kentucky – AEC 661: Programming Models in Agricultural

Economics 9-18-2018
**Guest Lecture**, University of Kentucky – GEN 100: Issues in Agriculture, Food and Environment, 9-6-18
**Guest Lecture**, Eastern Kentucky University – AGR 350: Agricultural Marketing, 10-13-2017
**Guest Lecture**, University of Kentucky – AEC 661: Programming Models in Agricultural Economics 9-21-2017
**Guest Lecture**, Eastern Kentucky University – AGR 350: Agricultural Marketing, 5-2-2017
**Guest Lecture**, University of Kentucky – AEC 300: Energy Economic, 2-8-2016

## STUDENT ACTIVITIES

**Ph.D. Dissertation**
Committee Member
Katherine McLachlan Rod (Plant and Soil Science), Expected graduation May 2020.
Michele Vollaro (Agricultural Economics), Expected graduation December 2019.
Elzbieta Szuleta (Plant and Soil Science), Expected graduation May 2022

Outside Examiner
John Brunnquell (Animal and Food Science), Expected graduation May 2020.

**Masters Thesis**
Chair
Shelby Wade (Agricultural Economics), Graduated May 2019, *Two Essays in Fertilizer Management for Improved Profitability*
Robert Ellis (Agricultural Economics), Expected graduation December 2019

Committee Member
Lydia Fitzgerald (Plant and Soil Science), Expected graduation December 2019
Ryan Collins (Weed Science), Expected graduation May 2020

**Undergraduate Internships or Research Directed or Co-Directed at UK**

Cassidy Smith, Fall 2019, NextHome Custom Realty
Spencer Shouse, Summer 2019, Lawns of Perfection, LLC
Cody Burke, Summer 2018, Roode Feedyard
Misty Bean, Summer 2016, Archer Daniels Midland

**Undergraduate Advising**
Fall 2020 – 6 advisees
Spring 2020 – 6 advisees
Fall 2019 – 6 advisees
Spring 2019 – 6 advisees
Fall 2018 – 6 advisees
Spring 2018 – 5 advisees
Fall 2017 – 5 advisees
Spring 2017 – 4 advisees

## UNIVERSITY ACTIVITIES

| Role | Committee | Dates |
|---|---|---|
| *College Committees* | | |
| Co-Chair | CAFÉ Strategic Initiatives: Agricultural Economics/Farm Management | 2015-2016 |
| Member | CAFÉ Strategic Initiatives: Data Management and Technology | 2015-2016 |
| Member | County Review Team: Warren, Barren, and Clinton Counties | 2016 |
| *Departmental Committees* | | |
| Member | Ag Marketing Faculty Search Committee | 2019 |
| Member | Production/Resource Faculty Search Committee | 2019 |
| Member | Undergraduate Program Committee | 2019-Present |
| Mentor | KAFC Beginning Farmer Business Mentor: Houston Howlett – Camp Nevin Farms | 2018-Present |
| Member | Production/Resource Faculty Search Committee | 2018-2019 |
| Member | Regional/Rural Development Economics Faculty Search Committee | 2018-2019 |
| Member | Graduate Admissions Committee | 2017-2019 |
| Member | Graduate Program and Research Committee | 2016-2019 |
| Coordinator | Agribusiness Club Annual Trip to St. Louis, MO | 2016 |
| Member | 2nd Year Paper Review Committee | 2016 |

## PROFESSIONAL ORGANIZATIONS

### International

International Society of Precision Agriculture (ISPA)
- Leader, Precision Agriculture Economics, Profitability, Adoption, and Risk Community (2018-Present)
- Vice Founding Leader, Precision Agriculture Economics, Profitability, Adoption, and Risk Community (2017-2018)
- Member (2015-Present)

### National/Regional

American Society of Agronomy
- Certified Crop Advisor (CCA) Precision Agriculture Exam Committee Member (2020-2023)

Southern Extension Economics Committee
- President (2019-2020)
- Vice President (2018-2019)
- Treasurer (2017-2019)
- Member (2016-Present)

Southern Outlook Conference Organizational Committee
- Member (2017-Present)

North Central Farm Management Committee
- Member (2016-Present)

North Central Extension & Research Activity (NCERA) – 180: Precision Agriculture Technologies for Food, Fiber, and Energy Production
- Member (2016-Present)

North Central Extension Farm Technology Economics Network
- Member (2016-Present)

Southern Cover Crops Council
- State Representative (2016-Present)

Agricultural & Applied Economics Association
- Member (2015-Present)