

Education:

PhD, Colorado State University, 1995
MBA, University of Colorado, 1991
BComm, University of Manitoba, Canada, 1990

Relevant Professional Experience:

Professor, University of Arkansas, 2006 – present.
Associate Professor, University of Arkansas, 2001 - 2006.
Assistant Professor, University of Arkansas, 1996-1997, 1999 - 2001.
Assistant Professor, University of Manitoba, 1997 - 1998.
Interim General Manager, TripleLeaf Minnedosa, Minnedosa, MB, Canada, 1991 - 1992.

Areas of Research Expertise/Specialization (Appointment: 20-25% Teaching, 65-70%Research, 5-10% Service):

Dr. Popp's research focus is on the evaluation of alternative farm enterprises involving innovative and sustainable production methods by analyzing risk-return tradeoffs. Recent efforts have involved evaluation of soybean production practices, effects of GM labeling, modeling of crop agriculture for the state with a view to estimate spatial land use changes with the introduction of switchgrass, energy sorghum, pine (for carbon sequestration) and industrial hemp. Evaluation of logistics associated with cellulosic energy crops. Modeling of pasture and development of decision support software for beef production from a net return and net greenhouse gas emissions perspective, analysis of cost and returns for alternative energy crops, economic and phenological modeling of soybean, economic and herbicide-resistance assessment of pigweed management practices, review of fertilizer recommendations in soybean and rice, and evaluation of tractor guidance technology.

Teaching Experience (2010 – 2019):

AGEC 4403 – Advanced Farm Management – 2015-2019 (4.67/5.00)
AGEC 4313 – Agribusiness Management – 2010-2019 (4.24/5.00)
AGEC 2142/1L – Agricultural Financial Records – 2010-2014 (4.06/5.00)

Dr. M. Popp has taught three additional different classes (AGEC 3303 at UofA, junior level risk management 61.354 and freshman introduction to agricultural economics classes 61.040 at University of Manitoba, Canada) prior to 2010.

Professional Service:

- Adhoc reviewer for at least 15 journals (I typically review 5-15 manuscripts annually)
- Advisor to Agribusiness Club, 2001 - 2005
- Faculty Senate member, 2003 - 2005
- Associate Editor, Agronomy Journal, 2006 - 2012
- Member of 2 expert panels on alternative energy research grant proposals (USDA NIFA & BRDI) as well as 2 SBIR panels
- Planning committee for Farm Foundation Transition to a Bioeconomy conference series. Assisted with and led coordination of last three events for a series of five national conferences with Dr. Halbrook and Mary Thompson (2008 – 2009)
- Gamma Sigma Delta Agricultural Honors Society member since 1996, Chapter Officer (2012/13-2015/16)
- State FFA Farm Business Management test coordinator (1999 - 2014)
- Editorial Council, *Journal of Agricultural and Applied Economics* (2017 - 2019)
- Editorial Board, *Discovery Journal* (2019 – present)
- Honor's College Fellowship review panel member and grant reviews (2017 - present)
- University Committee on Committees (2020 – present)
- Departmental committees for library and resources, awards, student recruiting and retention, and social committees as well as search chair or search committee member on department head, instructor, and faculty searches. I have also served to summarize departmental research related to farm management and agribusiness for annual NIFA reporting (2016-2019) with Dr. Bobby Coates
- Service to industry and stakeholders with special reports (e.g. 2012 drought impact on beef cattle operations, impact of changing fuel prices on Arkansas row crop producers by county, etc.) when needed. Development and maintenance of six different, on-line decision support software aimed at allowing producers to plan for farm-specific circumstances using Excel spreadsheet software.
- Dr. Popp has given invited presentations in Canada, France, Belgium and Austria on the topic of economics of renewable biofuels and livestock production practices.

- Moderated selected paper sessions and chaired selected poster submissions for the SAEA
- Member of NC1182 Regional Project entitled “Management and Environmental Factors Affecting Nitrogen Cycling and Use Efficiency in Forage-Based Livestock Production Systems” since 2019.

Honors and Awards:

- Outstanding Teacher Recognition Award at the University level. 1998. University of Manitoba.
- 1st Place, Presented Poster Award. 2001 & 2016. Southern Agricultural Economics Association.
- 1st, two time 2nd and 3rd Place, Case Study Competition Co-coordinator with Dr. M. Thomsen. 2006 – 19. American Agricultural Economics Association. We did not compete several years during that period.
- 3rd Place, Presented Poster Award. 2011. Southern Agricultural Economics Association.
- John White Team Research Award. 2014. Division of Agriculture.
- Gamma Sigma Delta Honors Society. 2017 Arkansas Chapter Research Award of Merit
- Agricultural and Resource Economics Review Fellow. 2018.
- Dr. M. Popp’s students have placed at selected poster competitions at the university and at SAEA meetings. One of Dr. M. Popp’s undergraduate honors students received the Gold medal for his thesis.

Selected Grants and Contracts:

- Two Southcentral SunGrant Initiative, DOT-RITA grants: “Assessing and Predicting Switchgrass and High-Biomass Sorghum Yields and Economic Viability”. Co-PI. \$367,158. 2011-15 and “Evaluation of Energy and Cost Advantages of Modules for Packaging and Transporting Biomass Energy Crops”. Co-PI. \$285,708. 2007-10.
- Two NRI 66.0 Agricultural Prosperity for Small- and Medium-Sized Farms. “Beef cattle production on grass-legume mixes: Economic implications of establishment methods and grazing systems performance”. Co-PI. \$450,000. 2009-12 and “Beef Cattle Supply Chain Impacts of Novel Endophyte Fescue: Tradeoffs between Animal and Forage Performance in the Tall Fescue Region”. Co-PI. \$498,740. 2007-10.
- Three grants from Mack Blackwell Transportation Center on biodiesel research. Co-PI. \$142,305
- From Monsanto, “Estimating the carbon footprint of conventional and GMO sweet corn”. Co-PI. \$78,000. 2010-11.
- Dr. Popp has had ongoing support to analyze crop production practices from Arkansas Soybean, Rice and Cotton Commodity Boards as PI and Co-PI. \$1,666,904. 1998-present.
- From the United Soybean Board and the MidSouth Soybean Board, “Decision-support Tools and Economics of Maturity Group Selection for Planting-Date and Latitude Combinations throughout the Mid-South Soybean Production Region”. Co-PI. \$108,064. 2015 and “Decision-support for SOYRISK”. \$26,108. 2016, respectively.
- USDA-ARS Dale Bumpers Small Farm Research Unit. On-going support for analyses of innovative production practices for small farms. \$85,500 awarded to M. Popp to date.
- Arkansas NRCS-CIG. Analysis of innovative poultry litter application methods. \$149,662. 2017-20.
- USDA SARE. “Innovative nutrient management options for sustainable pasture land intensification.” PI. \$296,498. 2019-21.
- Two grants from Walmart Family Foundation for Center for Food and Farm Systems Entrepreneurship now called Center for Arkansas Farms and Food. Co-PI. \$2,498,878. 2018-24.
- Two grants from Soil Test Review Board on analyses of K fertilizer recommendations in soybeans and rice. PI and co-PI. \$43,590. 2019-21.
- SAS CAP, USDA-NIFA CPPM and CARE grants related to Palmer Amaranth management. Co-PI. \$680,438. 2014-23.

Excluding indirects, the above, and other minor grants have led to research funding of approximately \$50,000 in Canadian funds, and \$1.3 million in US funds for Dr. M. Popp. Total grant awards amount to approximately \$7.5 million including indirects for UA research.

Publications and Presentations:

- 89 Refereed professional journals (published and in press)
- 3 Invited Papers
- 4 Undergraduate student refereed research publications
- 11 Reviewed experiment station research bulletins and reports
- 67 Local, state, regional, national and international presentations
- 62 Selected Papers/Posters, symposia and proceedings
- 50 Extension newsletters and other miscellaneous reports
- 6 Decision support software (available at <http://agribusiness.uark.edu/decision-support-software.php>)
~ 2,200 unique page views (Jan. 1 2017- Feb. 17, 2019)

Student Theses and Dissertation - directed: 1 PhD, 16 MS, 3 UG Honors
- committee: 4 PhD, 20 MS, 2 UG Honors

- Currently directing one MSc, and serving on committees for 1 UG Honors, 1 MSc, and 2 PhD.

Refereed Publications (2016-2020):

Kovacs, K.; Y. Xu, G. West and M. Popp. 2016. "The Tradeoffs between Market Returns from Agricultural Crops and Non-Market Ecosystem Service Benefits on an Irrigated Agricultural Landscape in the Presence of Groundwater Overdraft." *Water*, 8(11): 501. doi:10.3390/w8110501

Popp, M., L.C. Purcell, and M. Salmerón. 2016. Decision support software for soybean growers: analyzing maturity group and plant date tradeoffs for the Midsouth. *Crop, Forage, and Turfgrass Management*, 2:1-9. doi:10.2134/cftm2016.0028.

Popp, M., E. Wolfe, E. Gbur, J. Rupe, C. Rothrock, K. Cochran and A. Steger. 2016. "Storage environment effects on soybean seed emergence and estimated cost of production". *Seed Technology Journal*, 37(2):135-150.

Smith, S. A., M. Popp, D. Keeton, C. West, K. Coffey, L. Nalley and K. Brye. 2016. "Economic and Greenhouse Gas Emission Response to Pasture Species Composition, Stocking Rate, and Weaning Age by Calving Season, Farm Size, and Pasture Fertility." *Agricultural and Resource Economics Review*, 45(1):98-123. doi: 10.1017/age.2016.11

Weeks, W., M. Popp, J. Rupe, C. Rothrock, J. Ross, and A. Steger. 2016. "Replanting Thresholds for Soybean Using Two- and Four-Week Plant Survival Metrics". *Agronomy Journal*, 108 (2):680-691. doi:10.2134/agronj2015.0339

Weeks, W., M. Popp, M. Salmerón, L.C. Purcell, E.E. Gbur, F.M. Bourland, N.W. Buehring, L. Earnest, F.B. Fritsch, B.R. Golden, D. Hathcoat, J. Lofton, A.T. McClure, T.D. Miller, C. Neely, G. Shannon, T.K. Udeigwe, D.A. Verbree, E.D. Vories, W.J. Wiebold, and B.L. Dixon. 2016. Diversifying soybean production risk using maturity group and planting date choices. *Agronomy Journal*, 108(5):1917–1929. doi:10.2134/agronj2016.01.0056

Wegerer, R., M. Popp, X. Hu and L. Purcell. 2016. "Economic Implications of Soybean Maturity Group, Herbicide Program, and Irrigation Requirement". *Crop, Forage, and Turfgrass Management*, 2:1-11. doi:10.2134/cftm2015.0143

Evans, M. R., B. E. Jackson, M. Popp and S. Sadaka. 2017. "Chemical Properties of Biochar Materials Manufactured from Agricultural Products Common to the Southeast United States. *Horticulture Technology*, 27(1):16-23
doi:10.21273/HORTTECH03481-16

Ashworth, A., A.C. Rocateli, C.P. West, K.R. Brye, and M. Popp. 2017. "Switchgrass Growth and Effects on Biomass Accumulation, Moisture Content, and Nutrient Removal". *Agronomy Journal*, 109(4):1-9. doi:10.2134/agronj2017.01.0030

Lindsay, K., M. Popp, J. Norsworthy, M. Bagavathiannan, S. Powles and M. Lacoste. 2017. "PAM: Decision Support for Long-Term Palmer Amaranth (*Amaranthus palmeri*) Control. *Weed Technology*, 31(6):915-927. doi.org/10.1017/wet.2017.69

Wolfe, E., M. Popp, C. Bazzani, R.M. Nayga Jr, D. Danforth, J. Popp, P. Chen, H.S. Seo. 2017. "Consumers' willingness to pay for edamame with a genetically modified label". *Agribusiness: An International Journal*, 00:1-17. doi: 10.1002/agr.21505

Ashworth, A., K. Lindsay, M. Popp and P. Owens. 2018. "Economic and Environmental Impact Assessment of Tractor Guidance Technology". *Agricultural & Environmental Letters*, 3(1): 180038. doi:10.2134/acl2018.07.0038

Lindsay, K., M. Popp, A. Ashworth, P. Owens, and J. Burek. 2018. "A Decision Support System for Analyzing Tractor Guidance Technology". *Computers and Electronics in Agriculture*, 153:115-125. doi:10.1016/j.compag.2018.08.014

Lindsay, K., M. Popp, C. West, A. Ashworth, A. Rocateli, R. Farris, V.G. Kakani, F. Fritsch, S. Green, M. Alison, M. Maw and L. Acosta-Gamboa. 2018. "Predicted Harvest Time Effects on Switchgrass Moisture Content, Nutrient Concentration, Yield and Profitability". *Biomass and Bioenergy*, 108(1):74-89. doi:10.1016/j.biombioe.2017.09.017

Popp, M., A. Ashworth, P. Moore Jr., P. Owens, J. Douglas, D. Pote, A. Jacobs, K. Lindsay, and B. Dixon. 2018. "Fertilizer Recommendations for Switchgrass: Quantifying Economic Effects on Quality and Yield". *Agronomy Journal*, 110(5):1854-1861. With supplemental decision tool. doi:10.2134/agronj2018.04.0273

Xing, X., M. Popp, P. Chen, P. Manjarrez-Sandoval, and E. Gbur. 2018. "Evaluation of High-Oil and High-Protein Soybean Using Component Pricing". *Journal of Crop Improvement*, 32(2):264-280. doi:10.1080/15427528.2017.1414722

- Lee, J.Y., M. Popp, E. Wolfe, R.M. Nayga Jr., J. Popp, P. Chen P, and H.S. Seo. 2018. "Information and Order of Information Effects on Consumers' Acceptance and Valuation for Genetically Modified Edamame Soybean." PLoS ONE, 13(10):e0206300. doi.org/10.1371/journal.pone.0206300
- S. Abugho, N. Burgos, V. Singh, R. Salas, W. J. Ross, and M. Popp. 2019. "Response of Edamame Soybean Variety 'AVS-4002' to Herbicides." Agronomy Journal, 111:1958-1966. doi:10.2134/agronj2018.09.0585
- Tester, C., M. Popp, N. Kemper, L. Nalley and G. West. 2019. "Impact of Weather and Herd Size Management on Beef Cow Profitability". Journal of Agricultural and Applied Economics, 51:1-23. doi:10.1017/aae.2019.13
- M. Popp, J. Crystal, C. Tester, C. Rosenkrans Jr., and E. Gbur. 2020. "Economic evaluation of genetic markers for cow-calf operations differentiated by forage type and breed". Agricultural Systems, 177:1-9. doi:10.1016/j.agsy.2019.102712
- Xing, X., M. Popp and H. Price. 2020. "Acculturation Strategies of Chinese University Students in the United States: A Case Study of Arkansas". Journal of Advances in Education Research, 5(1):11-24. doi:10.22606/jaer.2020.51002
- Rocateli, A., A. Ashworth, C. West, K. Brye, M. Popp, and J. Kiniry. 2020. "Simulating Switchgrass Biomass Productivity using ALMANAC. I. Calibration of Soil Water". Agronomy Journal, 1-11. doi:10.1002/agj2.20054
- Nieman, C., M. Popp, D. Schaefer, K. Albrecht and J. Franco. 2020. "Evaluating sod-seeded annuals in cool-season cow-calf pastures in Wisconsin". Journal of Farm Managers and Rural Appraisers. 177-186.
- Tester, C., M. Popp, L. Nalley and B. Dixon. 2020. "Relative Impact Analysis of Factors Influencing Cow-Calf Cash Operating Profit Using Different Modeling Techniques". Journal of Agricultural and Applied Economics. 1-16. doi:10.1017/aae.2020.6
- Kharel, T., A. Ashworth, A. Shew, M. Popp, and P. Owens. 2020. "Tractor Guidance Improves Production Efficiency by Reducing Overlaps and Gaps". Agricultural Environmental Letters. doi.org/10.1002/ael2.20012