MICHAEL B. DANIELS

CURRICULUM VITAE



the Pennsylvania State University

University of Arkansas

University of Arkansas

CURRENT ADDRESS AND CONTACT INFORAMATION

University of Arkansas System Division of Agriculture Cooperative Extension Service 2301 S. University Ave. Little Rock, AR. 72204 Phone Office: 501 671-2281 Phone Cell: 501 581-9937 Email: mdaniels@uada.edu

ACADEMIC TRAINING

- 1992 Ph. D. (Soil Science-Soil Physics)1988 M.S. (Agronomy)
- 1986 B.S. (Soil Science)

PROFESSIONAL POSITIONS

- 2019 Present Professor, Extension Soil and Water Conservation Associate Department Head, Extension University of Arkansas Division of Agriculture – Coop. Extension Service.
- **2017 Present** Professor, Extension Soil and Water Conservation Administrative Apprentice University of Arkansas Division of Agriculture – Coop. Extension Service.
- **2006- Present** Professor, Extension Soil and Water Conservation University of Arkansas Division of Agriculture – Coop. Extension Service.
- **2000 2006** Associate Professor, Environmental Management-Agriculture. University of Arkansas Division of Agriculture – Coop. Extension Service.
- **1996-- 2000** Assistant Professor, Environmental Management-Agriculture University of Arkansas Division of Agriculture Coop. Extension Service.
- **1992 1995** Project Leader for Soil Physics. Agricultural Research Department. The Environmental Research Center, Tennessee Valley Authority
- 1990 1992 Soil Physics Consultant for GeoDecisions, Inc. State College, PA.

CURRENT RESPONSIBILITY

- Appointment: 65% Extension 10% Service 25% Administration
- Provide Statewide Extension leadership as Specialist for soil and water conservation education

- Associate Department Head for Extension, Crops, Soils and Environmental Sciences
- Co-Director of Arkansas Discovery Farms

AWARDS AND RECOGNITION

- 2021 Arkansas Soil and Water Conference Outstanding Conservationist presented by the Judd Hill Foundation (*Unsolicited*)
- Arkansas Discovery Farm Finalist for the 2019 ADEQ ENVY Award
- USDA-NRCS Partnership Award- Member of Division Team (Led effort to prepare nomination package)
- U of A Extension Excellence- State Team U of A Discovery Farm 2019
- 2018 Runner-up State of Arkansas Environmental Envy Award for the Arkansas Discovery Farm Program presented by the Arkansas Department of Environmental Quality.
- 2017 John White Team Award for the Arkansas Discovery Farm Program presented by the University of Arkansas Division of Agriculture
- 2016 Soil and Water Conservation Society's Presidential Leadership Award (Unsolicited)
- 2016 Mid-South Farm and Gin Show Agricultural Achievement Award
- 2015 State Award Winner for website Arkansas County Agricultural Agent Association
- 2015 State Award Winner for Learning Module Arkansas County Agricultural Agent Association
- 2015 National Runner-up for Learning Module National Association of County Agricultural Agents
- 2013 John White Award for Outstanding State Extension Specialist presented by the University of Arkansas Division of Agriculture
- 2011 John White Team Award P-Index Development and Nutrient Management Training Team presented by the University of Arkansas Division of Agriculture
- 2010 Outstanding Conservation Professional awarded by the Ark. Assoc. of Conservation Districts (*Unsolicited*)
- 2010 Employee of the Quarter, UA Division of Agriculture

SERVICE AND LEADERSHIP

External

- Prepared the nomination package for Mr. Andrew Wargo's induction into the Arkansas Agricultural Hall of Fame, 2020
- 2019 Co-Chair SERA-46 Gulf of Mexico Hypoxia Research and Extension Team (13 States along Mississippi River
- Graduate of LEAD21 National Leadership Development Program
- Chairman, Environmental Quality Division of the American Society of Agronomy
- Chairman, Southern Region Extension Water Resource Committee (13 States)
- Wrote a letter of support for the nomination of Dr. Dianne Boellstorff for a National NIFA Extension Award at the request of Associate Director of Texas AgriLife Extension, 2018

- Wrote a letter of support for the nomination of Dr. Forbes Walker for a National NIFA Extension Award at the Request of Dr. Julia Carrier, Department Head University of Tennessee, 2018
- Reviewed the Promotion Package of colleagues at the request of Auburn University, University of Tennessee (2), North Carolina State University, University of Maryland, Texas A&M University, Clemson University, Mississippi State and USDA-ARS.
- Reviewed a proposal for the University of Nebraska Research Collaboration Initiative at the request of their Experiment Station Director, 2017
- Chair the Agriculture Review and Selection committee for the Louisiana Board of Regents grant program, 2015.
- Serve of the Science Advisory Board and Selection Committee for the Tulane Gulf of Mexico Water Challenge, a program that will award \$1 million prize, 2015.

Internal

- Served as Chair of Selection Committee for the Extension Leadership Program, 2021
- Served as Chair of the Selection Committee for Soil Microbiology Post Doc Fellow, 2021
- Lead the Extension Portion of External Departmental Review, 2020
- Served as Co-Chair of the Environment, Energy and Climate Chapter of the Federal NIFA Report for the Division 2018 Present
- Serve as Co-Chair of Extension Spatial Technology Committee
- Co-Leader of Arkansas Discovery Farm Program, 2008 Present
- Co-Chair of UA Division of Agriculture Environmental Task Force, 2008 -2012
- Served as Chair of the Extension Non-Tenure Unit Promotion Committee for those Extension Faculty not assigned to an academic department, 2018
- Served as Co-Chair of the Environment, Energy and Climate Chapter of the Federal NIFA Report and Plan of Work for the Division, 2013-2016
- Served as Chairman of Environment, Energy and Climate portion of Division's Strategic Plan Development, 2016
- Served on CSES Promotion and Tenure Committee, 2007- 2018 (Elected by Departmental Faculty; Asked to be removed from ballot in 2019 so that others in Extension could serve).
- Served as Chair of Irrigation Instructor Search Committee, 2018
- Served as Chair of Search Committee for Soils Instructor, 2018
- Served as Chair of Search Committee for FSMA Specialist, 2017
- Served as Chair of John White Award for Outstanding County Agent, 2016 Present.
- Served as Chair of Search Committee for Discovery Farm Program Associate, 2018
- Served as Chair of Search Committee for Joint NRCS/Extension Water Quality Program Associate. 2016 & 2018
- Served on Uniform Guidance Committee to help review and/or establish new procedures for working with grants (Sandra Williams, Chair), 2016
- Served of University of Arkansas Division of Agriculture Non-Tenure Promotion Committee (College Wide), 2015
- President of the Arkansas Association of Cooperative Extension Specialists, 2013

GRANTS AND EXTERNAL FUNDING (Summary: \$11,525,260 Total; \$6,069,199 as PI from 25 Sources)

Power, **Daniels**, et al. Cultivating Farmer Leaders and Farmer-to-Farmer Learning for Cleaner Waters and Healthier Soils in the Mississippi and Atchafalaya River Basins. UADA portion **\$198,980.** Gulf of Mexico Division Farmer to Farmer NUMBER: EPA-GM-2020-FARMER

Daniels and Sharpley. Arkansas Discovery Farm – Water Sustainability. 2019-2021. Arkansas Soybean Promotion Board. \$52,500

Daniels and Sharpley Arkansas Discovery Farm – Water Sustainability. 2019-2022. Arkansas corn and Grain Sorghum Board. \$15,000

Daniels, Jennings, Espinosa, Davis, Fryer. 2019-2022. Soil Health for Grazing Lands. USDA-NRCS. \$454,000

Sharpley, Daniels, Robertson, Fryer. 2019-2020. The Fertilizer Institute

Daniels, Sharpley, Hamilton and Hardke. 2109. Sustainable Rice Discovery Farm. Anhueser Busch \$130,000

Daniels, Robertson, Fryer, Roberts, McWhirt and Wilson. October 2020 - 2023. Enhancing Soil Health Technical Assistance with a Soil Ecologist. USDA-NRCS-Arkansas. \$161,759.92

Wilson, **Daniels**, Fryer, and VanDevender. October 2020 - 2023. A Discovery Farm and Demonstrations to Develop Technical Assistance for Utilizing Poultry Litter on Row Crops. USDA-NRCS-Arkansas. \$553,992.73

Robinson, **Daniels**, Robertson, McWhirt and Hamilton. October 2020 – 2023. Virtual Professional Development and Education Extending the Benefits of Arkansas Conservation Partnership. USDA-NRCS-Arkansas.

Baker, **Daniels**, Power, Gumpert, Christianson. 2019-2021. Improving Water Quality with Farmer-Led Initiatives and Farmer-Driven Data through a Multi-State Collaboration. Arkansas Portion **\$149,475**. EPA Gulf of Mexico Program Farmer to Farmer Cooperative Agreements

Robinson, Julie, **Mike Daniels**, Bill Robertson, Amanda McWhirt, Mike Hamilton 2018-2021. Virtual Field Demonstrations and Education Extending the Benefits of Soil and Water Conservation. **\$658,333**. USDA-NRCS Partnership Contract.

Daniels and Sharpley. 2018. Infra-Structure Support for Discovery Farms, **\$20,000**. EPA-319h via Arkansas Natural Resources Commission.

Daniels, Sharpley, Robertson, Brye and Roberts. 2017- 2021. Demonstrating, Documenting and Extending the Holistic Benefits of Soil and Water Conservation. **\$860,943**. USDA-NRCS Partnership Contract.

Daniels, Sharpley, Robertson, and Brye. 2017-2019. Demonstrating the Benefits of Conservation on Soil Health, Water Quality and Resilience to Climate Extremes. **\$74,984**. USDA-NRCS State Conservation Innovation Grant.

Sharpley and **Daniels**. 2017-2019. Monitoring K Loss in runoff from Discovery Farms. **\$77,480**. Arkansas Soil Test Review Board.

McPeake, **Daniels**, Miller and DeClerk. 2017-2021. Demonstrating Conservation Practices Benefitting Wildlife, Water Quality and Farm Economics on Working Lands. **\$260,000**. USDA-NRCS USDA-NRCS Partnership Contract.

Power, Gumpert, **Daniels**, Bonnell and Benning. 2017-2022. Building the Capacity for Watershed Leadership in the Mississippi River Basin. **\$250,000** (Arkansas share **\$35,000**). USDA-EPA

Roberts and **Daniels** 2016-2018. Happy Soils Happy Rice. **\$26,797**. USDA-NRCS State Conservation Innovation Grant.

Daniels and Sharpley. 2016-2022. Edge of Field Monitoring, Conservation Activities 201 and 202, for Arkansas Watersheds in NRCS' National Water Quality Initiative. **\$270,000**. USDA-NRCS-Arkansas.

McCullough and **Daniels**. 2015-2017. Ongoing Support for Arkansas NPS Pollution Management Plan. **\$17,811**. EPA 319h via Arkansas Natural Resources Commission.

Daniels, Sharpley, Barber and Henry. 2013 - 2015. A Cotton Discovery Farm in Arkansas. **\$57,500**. Cotton Incorporated.

Daniels and Sharpley. 2013 – 2015. Arkansas Discovery Farm – Water Sustainability. **\$53,512.** Arkansas Rice Research and Promotion Board.

Daniels and Sharpley. 2013 – 2018. Arkansas Discovery Farm – Water Sustainability. **\$60,000**. Arkansas corn and Grain Sorghum Board

Daniels and Sharpley. 2013. Enhancing the Arkansas Discovery Farm in the Arkansas River Valley. **\$50,000**. West Central Planning and Development Fund – GIF funds from State Legislature.

Daniels and Sharpley. 2016-2021. Extension – NRCS jointly funded Position for Water Quality Arkansas. **\$198,000**. USDA-NRCS Arkansas Partnership Agreement.

Daniels, Henry and Hamilton. 2013-2014. Demonstrating Computerized Hole Selection for Furrow Irrigation. **\$75,000**. NRCS State CIG.

Daniels and VanDevender. 2013 – 2020. Developing an on-line training program for State Nutrient Management Certification. **\$170,000**. Arkansas Natural Resources Conservation Service.

Liang, **Daniels**, Hardke, Pittman, Kelley, Washibe, Watkins and Riley. 2013 -2018. Managing Crop Residues to Reduce Particulate Matter Emissions. **\$888,012**. Arkansas Department of Environmental Quality.

Sharpley, **Daniels**, VanDevender, Brye, Haggard and Savin. 2014 – 2019. Demonstrating and Monitoring the Sustainable Management of Nutrients on C&H Farm in Big Creek Watershed. **\$640,510**. State of Arkansas General Improvement Fund

Sharpley and **Daniels**. 2013-2104. the Arkansas Discovery Farm for Cotton, **\$120,000**. State of Arkansas General Improvement Fund.

Sharpley and **Daniels**. 2013-2015 Assessing the Impact of Cost-Shared BMP's with Eucha-Spavinaw Illinois River Watershed Initiative on Nutrient Loss Reduction Potential. **\$108,150**. NRCS – Arkansas Partnership Contract.

Daniels, VanDevender, and Sharpley. 2013-2014. Nutrient Management Planning Training. **\$35,000**. Arkansas Association of Conservation Districts.

Sharpley and **Daniels**. 2013-2105. Assessing the Impact of the MRBI program using a conjunctive approach of 3-tiered monitoring and SWAT modeling. **\$250,000**. NRCS-Arkansas Partnership Contract.

Daniels, VanDevender, and Sharpley. 2013-2014. **\$19,000**. Revising the Nutrient Management Training Manual Arkansas Association of Conservation Districts.

Daniels and Sharpley. 2012 – 2015. Edge-of Field Monitoring for The L'Anguille Watershed Coalition's MRBI. **\$101,693**. NRCS-MRBI-CCPI Service Contract for Conservation Activities 201 & 202

Daniels and Sharpley. 2012-2014. Edge-of Field Monitoring for Desha County Conservation District Middle Bayou Macon MRBI. **\$48,807**. NRCS-MRBI-CCPI Service Contract for Conservation Activities 201 & 2021.

Daniels, M.B., Dennis Busch, Andrew Sharpley, Michele Reba, Chris Henry, Yushun Chen, Jennifer Bouldin, Tina Teague and Dewayne Johnson. 2012 – 2015. Building the Capacity for Edge-of-Field (EOF) Monitoring of Conservation through Field Demonstration, Regional Coordination, Training and Outreach. **\$969,299**. NRCS National Conservation Innovation Grant.

Daniels, M.B., Tom Riley, Dharmendra Saraswat and John Pennington. 2012-2104. the Arkansas Watershed Stewardship Program. **\$189,808**. EPA 319h grant administered by the Arkansas Natural Resources Commission.

Daniels, M.B., Andrew Sharpley, and Chris Henry. 2012-2104. Addressing Sustainability of Mid-south Soybean Production with regard to Water Use Efficiency utilizing the Arkansas Discovery Farm Program. **\$150,000**. Joint United Soybean Board and Arkansas Soybean Promotion Board Sustainability Grant.

Daniels, M.B., Andrew Sharpley, and Tom Barber. 2012-2014. An Arkansas Discovery Farm for Cotton. **\$60,000**. Cotton Incorporated.

Sharpley, Andrew and **M.B. Daniels.** 2011-2013. Critical Maintenance for the Arkansas Discovery Program. **\$120,000**. Awarded by the State of Arkansas from the Governor's General Improvement Fund.

Daniels M.B. and Andrew Sharpley. 2011- 2013. Addressing Sustainable Crop Production with the Arkansas Discovery Farm Program. **\$101,256**. Jointly Funded by the Arkansas Soybean Promotion Board, the Arkansas Rice Research Promotion Board and the Arkansas Corn and Grain Sorghum Promotion Board.

Daniels, M.B., Janet Carson and Bobby Johnson. 2011-2012. A Rain Garden for Outreach and Demonstration. **\$15,000**. EPA 319h grant administered by the Arkansas Natural Resources Commission.

Sharpley, A. and **M.B. Daniels**. 2011 – 2014. Demonstration of runoff, sediment and nutrient loss reduction with conservation tillage of soybean-rice rotations in the L'Anguille Watershed. **\$186,427**. EPA 319h grant administered by the Arkansas Natural Resources Commission.

Sharpley, A., **M.B. Daniels** and Debbie Moreland. 2010 – 2013. Develop a Nutrient Loss Reduction Strategy for Arkansas Using Conjunctive Three-tiered Monitoring, Modeling, and Tracking Approaches. **\$250,000**. USDA-NRCS State Grant.

Sharpley, A. and **M.B. Daniels**. 2011-2014. Assessing the Impact of Cost-Shared BMP's with Eucha-Spavinaw Illinois River Watershed Initiative on Nutrient Loss Reduction Potential. **\$108,500**. USDA-NRCS State Grant

Daniels, M.B. and A. Sharpley. 2010-2012. MRBI Education and Outreach. **\$55,000**. USDA-NRCS State Grant.

Daniels, M.B., K. VanDevender and A. Sharpley. 2011. Nutrient Management Training Revision. **\$35,000**. Grant from the Arkansas Association of Conservation Districts.

Daniels, M.B., K. VanDevender and A. Sharpley. 2011. Revising the Nutrient Management Training Manual. **\$19,000**. Grant from the Arkansas Association of Conservation Districts

Daniels, M.B. and A. Sharpley. 2010-2014. Edge-of-Field monitoring for the Point Remove MRBI project Area. **\$61,001**. USDA MRBI-CCPI program via the Point Remove Wetlands Reclamation and Irrigation District.

Daniels, M.B. and A. Sharpley. 2010-2014. Edge-of-Field Monitoring for the L'Anguille MRBI project Area. **\$97,616**. USDA MRBI-CCPI program via the L'Anguille River Watershed Coalition.

Daniels, M.B. and A. Sharpley. 2010-2014. Edge-of-Field Monitoring for the Middle Bayou Watershed MRBI project Area. **\$48,808**. USDA MRBI-CCPI program via the Desha County Conservation District.

Daniels M.B., A. Sharpley, D. Saraswat, K. VanDevender, B. Haggard, T.L. Riley, and M. Mozaffari. 2009-2012. The Southern Region Water Resources Project. **\$204, 419**. USDA National Institute of Food and Agriculture's 406 Integrated Water Program.

Daniels, M.B. The Southern Region Water Quality Facilitation Project. 2005-2007. **\$225,000**. Part of regional grant among 13 Southern States. USDA-CSREES. Integrated Research, Education, and Extension Competitive Grants Program.

M.B. Daniels, T.L. Riley, K. VanDevender, Susan Watkins, Leo Espinosa, and John Jennings. 2004. Nutrient Management Planning and Nutrient Applicator Training. **\$819,203**. EPA 319h Grant Administered by the Arkansas Natural Resources Commission.

Daniels, M.B. and T.L. Riley. The Southern Region Watershed Resources Management project. Part of regional grant among 13 Southern States. 2003-2004. **\$146,000**. USDA-CSREES Integrated Research, Education, and Extension Competitive Grants Program.

Hal Liechty, H.O., **M.B. Daniels**, M. Phillips, E. Heitzman, R. Ficklin. Surface water quality, soil chemistry, and tree growth response from application of poultry litter to pasture and forest landscapes 2002. **\$18,324**. University of Arkansas Agricultural Experiment Station Grant.

Daniels, M.B., T.L. Riley, and W. Kinkaid. 2002-2003. Bayou Bartholomew Incremental Funding. **\$75,000.** EPA 319h funding – Incremental Watershed Funding. EPA 319h Grant Administered by the Arkansas Natural Resources Commission.

Langston, J.L., P.A. Moore, Jr. S.E. Watkins, T.C. Daniel, and **M.B. Daniels**. 2000 -2003. Environmental Training for the Arkansas Livestock Industry. **\$450,000**. USDA-CSREES' Integrated Research, Education, and Extension Competitive Grants Program.

Kirkpatrick, T.L., W.H. Baker, A. Mauromoustakos, and **M.B. Daniels**. Site-Specific Detection and Control of Crop Nematodes. 2000 -2004. **\$265,112**. USDA-CSREES' Initiative for Future Agriculture and Food Systems.

Daniels, M.B., J.L Langston, T.L. Riley, and K. Vandevender. 2000 - 2003. Lower Little Watershed Education. **\$240,000**. EPA 319h Grant Administered by the Arkansas Natural Resources Commission.

Daniels, M.B., M. Hamilton, W. Coblentz, and M. Gross. 1999 -2002. Ballard Creek Watershed

Education. **\$300,000**. EPA 319h Grant Administered by the Arkansas Natural Resources Commission

Daniels, M.B. and Mike Hamilton. 1999 -2002. White River Watershed Education. **\$150,000**. EPA 319h Grant Administered by the Arkansas Natural Resources Commission.

Daniels, M.B., T.L. Riley, and W. Kinkaid. 2002-2003. Bayou Bartholomew Incremental Funding. **\$75,000**, EPA 319h funding – Incremental Watershed Funding. EPA 319h Grant Administered by the Arkansas Natural Resources Commission.

M. Hamilton, K. Teague, **M.B. Daniels**, T.L. Riley, and J. Jennings. 2001-2003. Phosphorus Management for sustainable livestock animal agriculture in Ozark watersheds. **\$261,500**. USDA-CSREES Integrated Research, Education, and Extension Competitive Grants Program.

Daniels, M.B., and T.L. Riley. 1998 -2000. Bayou Bartholomew Water Quality Education for Row-Crop Producers. **\$88,350**. EPA 319h Grant Administered by the Arkansas Natural Resources Commission

Tyler, Ralph, Bill Teague, **M.B. Daniels**, and K VanDevender. 1998. Enhancing nutrient management of land-applied animal manure using spatial technology. **\$1,000**. Southern Regional Extension Water Quality Mini-grant.

PUBLICATIONS

Peer-Review Journal Articles

Sharpley, A. N., Brye, K., Burke, J., **Daniels, M. B**., Webb, P. (2020). Can Soil Phosphorus Sorption Saturation Estimate Future Potential Legacy Phosphorus Sources. (Agrosyst. Geosci. Environ. 2020;3:e20122). <u>https://doi.org//10.1002/agg2.20122</u>.

Sharpley, A.N., **Daniels, M. B.**, VanDevender, K., Burke, J., Berry, L., Webb, P. (2020). Fate and Transport of Phosphorus-containing Land-Applied Swine Slurry in a Karst Watershed. *AgroSystems, Gesociene and Environmental.* doi.org//10.1002/agg2.20096.

Sharpley, A. N., Hays, P. D., VanDevender, K. W., **Daniels, M. B**. (2020). Phosphorus runoff risk assessment in karstic regions of the United States. *Agricultural Enviornmental Letters*(2020;3:e20096). https://acsess.onlinelibrary.wiley.com/doi/abs/10.1002/ael2.20001 doi.org/10.1002/ael2.2000.

Daniels, M.B., Andrew Sharpley, Bill Robertson, Edward Gbur, Lee Riley, Pearl Webb, Brittany L. Singleton, Amanda Free, Lawrence Berry, Cory Hallmark, and Teresa Nehls 2019. Nutrients in Runoff from Cotton Production in the Lower Mississippi River Basin: An On-Farm Study. Agrosyst. Geosci. Environ. 2:190033 (2019) <u>doi:10.2134/age2019.05.0033</u>

A.N. Sharpley, K.W. VanDevender, **M.B. Daniels**, and P.D. Hays. 2019. Phosphorus Runoff Risk Assessment in Karstic Regions of the U.S. Journal: Agricultural & Environmental Letters

Article ID: AEL220001. Article DOI: 10.1002/ael2.20001. Accepted 12/10/2019.

Daniels, M.B., Andrew Sharpley, Darren Harmel and Karma Anderson. 2018. The Utilization of Edge-of-Field Monitoring of Agricultural Runoff in Addressing Nonpoint Source Pollution. Journal of Soil and Water Conservation Society. Volume 73(1): pp 89-96.

Sharpley, A.N., B.E. Haggard, L. Berry, J. Burke, K. Brye, **M. Daniels**, E. Gbur, T. Glover, T. Kresse, P. Hays and K. Vandevender. 2017. Nutrient Concentrations in Big Creek Correlate to Regional Watershed Land Use. Agric. Environ. Lett. 2: pp 6. Amercian Society of Agronomy. Madison WS.

Sharpley, Andrew, **Mike Daniels**, Larry Berry, Cory Hallmark, and Lee Riley. 2016. Proactive Stakeholder Program Determines On-farm Effectiveness of Conservation Practices that Increases Fertilizer-Use Efficiency. Better Crops 100(3): 13-15. International Plant Nutrients Institute.

Herron Sherri L., Andrew N. Sharpley, Kristofor R. Brye, David M. Miller, Susan Watkins, David McCreery, and **Mike B. Daniels**. 2016. Determination of Nutrient Concentrations in Simulated Rainfall-Runoff from Poultry House Dust Deposited Adjacent to Exhaust Fans. Journal of Environmental Protection, 2016, 7, 27-40. Published Online January 2016 in SciRes. http://www.scirp.org/journal/jep_http://dx.doi.org/10.4236/jep.2016.71003

Sharpley, A., **M.B. Daniels**, L. Berry, C. Hallmark and J. Hesselbein. 2015. Arkansas Discovery Farms: documenting water quality benefits of on-farm conservation management and empowering farmers. Acta Agriculturae Scandinavica, Section B. Soil and Plant Science. Vol. 65, No. Supplement 2, 186-198. <u>http://dx.doi.org/10.1080/09064710.2014.960444</u>.

Herron, Sheri L., Kristofor R. Brye, Andrew N. Sharpley, David M. Miller, and **Mike B. Daniels**. 2015. Nutrient Composition of Dust Emitted from Poultry Broiler Houses in Northwest Arkansas. Journal of Environmental Protection, 2015, 6, 1257-1267. Published Online November 2015 in SciRes. http://www.scirp.org/journal/jephttp://dx.doi.org/10.4236/jep.2015.611110

Reba, M.L., **M. Daniels**, Y. Chen, A.N. Sharpley, J. Bouldin, T.G. Teague, P Daniel, and C.G. Henry. 2013. A statewide network for monitoring agricultural water quality and water quantity in Arkansas. J. Soil Water Conserv. 68(2): 45A- 49A. doi:10.2489/jswc.68.2.45A.

Pai, N., D. Saraswat, and **M. Daniels**. 2011. Identifying Priority Sub watersheds Using Distributed Modeling Approach. Transactions of the ASABE. 54(6): 2181-2196. @2011. https://elibrary.asabe.org/abstract.asp?aid=40657&t=1&redir=&redirType=

Daniels, M.B., S.L. Chapman, and W. Teague. 2002. Utilizing spatial technology as a decision-assist tool for precision grading of salt-affected soils. J. Soil and Water Cons. 57(3):134-143.

Daniels, M.B., P. Delaune, P.A. Moore, Jr., A. Mauromoustakos, S.L. Chapman, and J.M. Langston. 2001. Soil Phosphorus Variability in Pastures: Implications for Sampling and Environmental Management Strategies. J. Environ. Qual. 30:2157-2165.

Coblentz, Wayne, **M.B. Daniels**, J. Gulsaulis, J. Turner, D. Scarbrough, J. Humphrey, K. Coffey, P.A. Moore, K. Teague, and J. Speight. 2004. Effects of Nitrogen Fertilization on Phosphorus Uptake in Bermudagrass Forage Grown on High Soil-Test Phosphorus Sites. The Professional Animal Scientist. Vol. 20, Number 2, April 2004. pp. 146-154.

Slaton, N., K. Brye, **Mike Daniels**, Tommy Daniel, R Norman, and D. Miller. 2004. Nutrient Input and Removal Trends for Agricultural Soils in Nine Geographical Regions in Arkansas. J. Environ. Qual. 33:1606-1615.

Galdamez-Cabrera, N.W., K.P. Coffey, W.K. Coblentz, J.E. Turner, D. A. Scarbrough, Z. B. Johnson, J. L. Gunsaulis, **M. B. Daniels** and D. H. Hellwig. 2003. In-situ ruminal degradation of dry matter and fiber from Bermuda grass fertilized with different nitrogen rates and harvested on two dates. Animal Feed Science and Technology 105:185-198

Galdámez-Cabrera, N.W., K.P. Coffey, W.K. Coblentz, D. A. Scarbrough, J.E. Turner, E. B. Kegley, Z. B. Johnson, D. W. Kellogg, J. L. Gunsaulis, and **M. B. Daniels.** 2003. In situ solubility of selected macrominerals from common bermudagrass fertilized with different nitrogen rates and harvested on two dates. Anim. Feed Sci. Technol. 111:203-221.

Galdámez-Cabrera, N. W., K. P. Coffey, W. K. Coblentz, D. A. Scarbrough, J. E. Turner, E. B. Kegley, Z. B. Johnson, D. W. Kellogg, J. L. Gunsaulis, and **M. B. Daniels**. 2003. Sulfur concentrations and in-situ solubility of selected microminerals from common bermudagrass fertilized with different nitrogen rates and harvested on two dates. Anim. Feed Sci. Technol. 111:223-237.

Daniels, M.B. and D.D. Fritton. 1994. Groundwater mounding below a surface line source in a Typic Fragiudalf. Soil Sci. Soc. Am. J. 58:77-85.

Daniels, M.B. and H.D. Scott. 1991. Water use efficiency of double cropped wheat and soybean. Agron. J. 83:564-570.

Daniels, M.B. and H.D. Scott. 1991. Management effects on water use efficiency of double cropped wheat and soybean. Arkansas Farm Research 40(4):3-4.

Scott, H.D., J. DeAngulo, **M.B. Daniels**, and L.S. Wood. 1989. Flood duration effects on soybean growth and yield. Agron. J. 81:631-636.

Other Peer Reviewed Articles (e.g. review articles, proceedings, etc.).

Free, A., Fryer, M., Robertson, W. C., **Daniels, M. B.**, Watkins, K. B. (2020). *Cotton Research Verification Sustainability Program Report*. (Report Series 668 ed.). University of Arkansas Agricultural Experiment Station.

Daniels, M. B., Webb, P., Riley, L., Fryer, M., Sharpley, A. N., Berry, L., Burke, J. (2020). *Runoff Water Quality from Corn Production: A Summary of Results from the Arkansas Discovery Program* (669th ed.). University of Arkansas Agricultural Experiment Station. **Daniels, M. B.**, Webb, P., Riley, L., Fryer, M., Sharpley, A. N., Berry, L., Burke, J. (2020). *Runoff Water Quality from Soybean Production: A Summary of Results from the Arkansas Discovery Program* (670th ed.). University of Arkansas Experiment Station.

Fryer, M., Berry, L., Webb, P., Riley, L., Sharpley, A. N., **Daniels, M. B.**, Slaton, N. A. (2020). *Spatial Variability of Soil-Test Potassium and Other Soil Properties in 10 Arkansas Discovery Farm Fields* (666th ed.).

Shapley, **Daniels**, Slaton, Berry, Burk, Hallmark and Riley. 2019. Monitoring Potassium Losses in Runoff on Arkansas Discovery Farms: Preliminary Findings. In Wayne Sabbe 2018 Soil Fertility Report Series. Report Series 649. Nathan Slaton, Ed. University of Arkansas Agricultural Experiment Station. Pp. 40-51.

Daniels M.B., Bill Robertson, Andrew Sharpley, Pearl Webb, Lee Riley, Amanda Free and Mike Freyaldenhoven. 2019. Nutrient Losses Associated with Irrigation, Rainfall Runoff, and Seasonal Field Conditions in Cotton. In Summaries of Arkansas Cotton Research 2018. Report Series 660. Fred Bourland, Ed. University of Arkansas Agricultural Experiment Station. Pp.100-104.

Mike Daniels, Andrew Sharpley, Bill Robertson, Pearl Webb, Lee Riley, Amanda Free and Mike Freyaldenhoven. 2019. Seasonal Nutrient Losses in Runoff from Cotton. In Summaries of Arkansas Cotton Research 2018. Report Series 660. Fred Bourland, Ed. University of Arkansas Agricultural Experiment Station. Pp.96-99.

A. Free, B. Robertson, **M. Daniels**, B. Watkins, and S. Stevens. 2019. Cotton Research Verification Sustainability Program: Sustainability Report. In Summaries of Arkansas Cotton Research 2018. Report Series 660. Fred Bourland, Ed. University of Arkansas Agricultural Experiment Station. Pp.20- 21.

Daniels, Mike, Andrew Sharpley, Chris Henry, Cory Hallmark, Josh Hesselbein, Rick Wimberly and Grant Beckwith. 2016. Arkansas Discovery Farms: Monitoring Nutrient Loss in Runoff from Soybean Fields. In: Arkansas Soybean Research Series. J. Ross, Editor. University of Arkansas Division of Agriculture Research Series 618. Pp. 215-219. May 2016

Henry, Chris, Chris DeClerk, Rick Wimberley, **Mike Daniels**, Andrew Sharpley, Cory Hallmark, and Josh Hesselbein. 2016. Arkansas Discovery Farms: Improving Irrigation Efficiency in Soybean with Pipe Planner Design and a Surge Valve. In Arkansas Soybean Research Series. J. Ross, Editor. University of Arkansas Division of Agriculture Research Series 618. Pp. 172-175. May 2016

Shapley, **Daniels**, Slaton, Berry, Burk, Hallmark and Riley. 2018. Monitoring Potassium Losses in Runoff on Arkansas Discovery Farms: Preliminary Findings. In Wayne Sabbe Soil Fertility Report Series. Report Series 649. Nathan Slaton, Ed. University of Arkansas Agricultural Experiment Station. Pp. 35-42.

Daniels, M.B., Andrew Sharpley, and Chris Henry. 2015. Improving Irrigation Efficiency in Soybeans with Pipe Planner Design and a Surge Valve. In: 70th Annual Soil and Water Conservation Society Annual Conference: Book of Abstracts. July 2015. Soil and Water Conservation Society, Ankeny, Iowa. Page 167

Daniels, Mike, Andrew Sharpley, Chris Henry, Rick Wimberley, Cory Hallmark, and Josh Hesselbein. 2016. Arkansas Discovery Farms: Increasing Water Sustainability with Irrigation Scheduling. In: Arkansas Soybean Research Series.

Daniels, M.B., A. Sharpley, C. Henry, C. Hallmark, J. Hesselbein and S. Hirsh. 2014. An Arkansas Discovery Farm for Cotton: Nutrient and Sediment losses in Runoff. In: Summaries of Arkansas Cotton Research 2013. In: Summaries of Arkansas Cotton Research 2013 (Derrick Oosterhuis, Editor). University of Arkansas Division of Agriculture Research Series 618. Pp. 96 – 100.

Daniels, M.B., A. Sharpley, C. Henry, J. Hesselbein, C. Hallmark, and S. Hirsh. 2014. An Arkansas Discovery Farm for Cotton: Hydrological inputs and runoff. In: Summaries of Arkansas Cotton Research 2013 (Derrick Oosterhuis, Editor). University of Arkansas Division of Agriculture Research Series 618. Pp. 101 - 105.

Daniels, M.B. and S.L. Chapman. 2000. Spatial distribution of soil test phosphorus in Arkansas pastures. In Arkansas Soil Fertility Studies. 1999. W. E. Sabbe (editor). Agricultural Experiment Station. University of Arkansas Research Series 471

Coblentz, W.K., J.L Gunsaulis, **M.B. Daniels**, J.E Turner, D.A. Scarbrough, J.B Humphry, K.P. Coffey, K.A. Teague, J.D. Speight, and M.R. Gross. 2001. Effects of nitrogen fertilization on subsequent partitioning of nitrogen in cell wall and cell soluble fractions in bermuda grass forages. The 2001 Arkansas Animal Science Report.

Ntamatungiro, S., N.A. Slaton, C.E. Wilson, **M.B. Daniels**, J.R. Robison, L. Ashlock, and T. Windham. 1999. Effects of lime, phosphorus, and zinc, applications on rice and soybean production. In *Rice Research Studies* 1998. (Norman and Johnston, eds.) University of Arkansas Agricultural Experiment Station Research Series: 468:268-276.

Daniels, M. B., S. L. Chapman, R. Matlock, and A. Winfrey. Using Grid Soil Sampling in the Management of Problem Soils. 1998. in *Arkansas Soil Fertility Studies*. *1997.* W. E. Sabbe (editor). Agricultural Experiment Station. University of Arkansas Research Series 459.

Chapman, S. L., **M.B. Daniels**, and J. Clemons. 1998. Practical Applications of Grid Soil Sampling in Arkansas. In *Proceedings of the 1998 Southern Soil Fertility Conference*. G.V. Johnson (editor). The Samuel Roberts Noble Foundation. Ardmore, Oklahoma.

Sixte Ntamatungiro, N. Slaton, **M.B. Daniels**, C.E. Wilson, J.R. Robinson, L. Ashlock, and T. Windham. 1998. Effects of Lime, Phosphorus, and Zinc on Rice and Soybean Rotation on a Crowley Silt Loam. 1998. In *Rice Research Series 1997*. Rick Norman and T.H. Johnston

(editors). Agricultural Experiment Station. University of Arkansas Research Series 460. Pp. 153-162.

Chapman, S.L., **M.B. Daniels**, Y.S. McCool, W.H. Baker, and W.E. Sabbe. 1997. Soil Test Characteristics of Major Land Areas in Arkansas in 1996. In *Arkansas Soil Fertility Studies*. *1997.* W. E. Sabbe (editor). Agricultural Experiment Station. University of Arkansas.

Extension Fact Sheets and Chapters in Manuals and Guides

Webb, P., **Daniels, M. B.** (2020). *Creating Points from Coordinates* (FSA2192PD-12-20N ed.). University of Arkansas System Division of Agriculture Cooperative Extension Service.

Webb, P., **Daniels, M. B**. (2020). *Using ArcGIS Pro: Creating a Field Boundary* (vol. FSA2193PD-12-20N). University of Arkansas System Division of Agriculture Cooperative Extension Service Printing Services.

Burke, J., L. B., **Daniels, M. B.,** Webb, P., Sharpley, A. N., Robertson, W. C. (2020). *Using the Water Quality Index for Runoff from Agricultural Fields (WQIag) Service* (FSA9539-PD-02-2020N ed.). University of Arkansas System Division of Agriculture Cooperative Extension Service Printing Services.

Webb, P., **Daniels, M. B.**, Berry, L., Sharpley, A. N., Singleton, B. (2020). *Using the Web Soil Survey: An Online Tool from the USDA* (FSA2189-PD-07-2020N ed.). University of Arkansas System Division of Agriculture Cooperative Extension Service Printing Services.

Daniels, M.B. and Susan Watkins. 2018. Flooding can Contaminate Your Well: Testing and Corrective Actions. Fact Sheet FSA9538. University of Arkansas System Division of Agriculture Cooperative Extension Service. www.uaex.edu. FSA9538-PD-11-2018N

Burke James, Andrew Sharpley, Larry Berry, Kris Brye, **Mike Daniels**, Ed Gbur, Karl VanDevender, Stephen King, Phil Hays and Brian Haggard. 2018. Nutrient Concentrations in Big Creek Correlate to Regional Watershed Land Use. Fact Sheet 9537. University of Arkansas System Division of Agriculture Cooperative Extension Service. www.uaex.edu. FSA9537-PD-3-2018N.

Austin, B.J., J.T. Scott, **M. Daniels**, and B.E. Haggard. 2016. Water Quality Reporting Limits, Method Detection Limits, and Censored Values: What Does it all Mean? Arkansas Water Resources Center, Fayetteville, Arkansas, FS-2016-01:8 pp.

Austin, B.J., Amit Sinha, Nathan Stone, W. Reed Green, **Mike Daniels** and Brian E. Haggard. 2016. How to Collect Your Water Sample and Interpret the Results for the Fish Pond Analytical Package. Arkansas Water Resources Center, Fayetteville Arkansas, FS-2016-02:11

Austin, B.J., D. Philipp, **M. Daniels**, and B.E. Haggard. 2016. How to Collect Your Water Sample and Interpret the Results for the Livestock Analytical Package. Arkansas Water Resources Center, Fayetteville, AR, FS-2016-03: 8 pp.

Austin, B.J., J. Payne, S.E. Watkins, **M. Daniels**, and B.E. Haggard. 2017. How to Collect Your Water Sample and Interpret the Results for the Poultry Analytical Package. Arkansas Water Resources Center, Fayetteville, AR, FS-2017-01: 8 pp.

Austin, B.J., **M. Daniels**, and B.E. Haggard. 2017. How to Collect Your Water Sample and Interpret the Results for the Domestic Analytical Package. Arkansas Water Resources Center, Fayetteville, AR, FS-2017-02: 08 pp.

Austin, B.J., L. Espinoza, C. Henry, **M. Daniels**, and B.E. Haggard. 2017. How to Collect Your Water Sample and Interpret the Results for the Irrigation Analytical Packages. Arkansas Water Resources Center, Fayetteville, AR, FS-2017-03: 08pp

Henry, C. M.B. Daniels and J.T. Hardke. 2013. Water Management. In: *Arkansas Rice Management Handbook. J.T. Hardke (Ed.)*. Publication MP192. University of Arkansas Division of Agriculture Cooperative Extension Service 2301 S. University Little Rock, Arkansas 72204. <u>http://www.uaex.edu/Other_Areas/publications/MP-192.asp</u>

Herron, S., A. Sharpley, S. Watkins and **M.B. Daniels**. 2012. Poultry Litter Management in the Illinois River Watershed of Arkansas and Oklahoma. University of Arkansas. Division of Agriculture. Cooperative Extension Service Fact Sheet FSA 9535. (Original)

Daniels, Mike, Andrew Sharpley, Patrick Fisk, Karl VanDevender, and Adrian Baber. 2011. Understanding Nutrient Management Laws for Turf grass, lawn care and landscaping. University of Arkansas. Division of Agriculture. Cooperative Extension Service Fact Sheet FSA9532PD-12-11N. Original. <u>http://www.uaex.edu/Other_Areas/publications/PDF/FSA-</u> 9532.pdf

Daniels, Mike and Karl VanDevender. 2011. Improving Home Water Quality. University of Arkansas. Division of Agriculture. Cooperative Extension Service Publication MP292-PD-9-11RV. Revision. <u>http://www.uaex.edu/Other_Areas/publications/PDF/MP292.pdf</u>

Pennington, John. **Mike Daniels**, Hal Leichty, and Chris Stuhlinger. 2011. A Riparian area assessment guide for streamside landowners. University of Arkansas. Division of Agriculture. Cooperative Extension Service Publication MP499-PD-6-11N. Original. http://www.uaex.edu/Other Areas/publications/PDF/MP499.pdf

Sharpley, Andrew, Mark Cochran, **Mike Daniels**, Brian Haggard, Marty Matlock, Tom Riley and Dharmendra Saraswat 2011. The Role of Nonpoint source models in watershed management. University of Arkansas. Division of Agriculture. Cooperative Extension Service Fact Sheet FSPPC112-7-11N. Original. <u>http://www.uaex.edu/Other_Areas/publications/PDF/FSPPC112.pdf</u>

Teague, Katie, Brad Huffines, Mark Brown, John Pennnington, Bernie Kurz, and **Mike Daniels**. 2011. Rainfall harvesting using rain barrels. University of Arkansas. Division of Agriculture. Cooperative Extension Service Fact Sheet FSA9534-PD-12-11N. Original

Teague, Katie, **Mike Daniels**, John Pennington and Mark Brown. 2011. Rain Gardens and Storm water. University of Arkansas. Division of Agriculture. Cooperative Extension Service Fact Sheet FSA9533-PD-12-11N. Original http://www.uaex.edu/Other Areas/publications/PDF/FSA-9533.pdf

Harris, Margaret, **Mike Daniels**. 2011. Safe Medicine Disposal in Arkansas. University of Arkansas. Division of Agriculture. Cooperative Extension Service Fact Sheet FSFC21-PD-6-11N. Original. <u>http://www.uaex.edu/Other_Areas/publications/PDF/FSFCS21.pdf</u>

Daniels, Mike, Patrick Fisk, Adrian Baber and Leo Espinosa. 2011. Un Resumen de las Regulaciones para el Manejo de Nutrientes en las Fincas Ganaderas en Arkansas University of Arkansas. Division of Agriculture. Cooperative Extension Service Fact Sheet FSA9523SP. Minor revision and translation to Spanish by Leo Espinosa. http://www.uaex.edu/Other_Areas/publications/PDF/FSA-9523SP.pdf.

Sharpley, Andrew, **Mike Daniels**, Karl VanDevender, and Nathan Slaton. 2010. Soil Phosphorus Management and Recommendations. University of Arkansas Division of Agriculture. Cooperative Extension Service. Fact Sheet FSA 1029-PD-9-10RV. Major Revision

Sharpley, Andrew, **Mike Daniels**, Karl VanDevender, P.A. Moore, Jr., B. Haggard, Nathan Slaton and Chuck West. 2010. Using the 2010 Arkansas P-Index. University of Arkansas Division of Agriculture. Cooperative Extension Service. Miscellaneous Publication MP487-PD-10-10RV.

Sharpley, Andrew, P.A. Moore, Jr., Karl VanDevender, **Mike Daniels**, Walt Delp, B. Haggard, Tommy Daniel, and Adrian Baber. 2010. The Arkansas P-Index. University of Arkansas Division of Agriculture. Cooperative Extension Service. Fact Sheet FSA9531-PD-3-10N.

Daniels, M.B. Thad Scott, Brian Haggard, Andrew Sharpley, and T. C. Daniel. 2009. What is Water Quality? University of Arkansas Division of Agriculture Cooperative Extension Service. Fact Sheet 9528.

Pennington, John, John Jennings, Andrew Sharpley, **Mike Daniels**, Phillip Moore, and Tommy Daniel. 2009. Grazing management Affects Runoff Water Quality and Forage Yield. University of Arkansas Division of Agriculture Cooperative Extension Service. Fact Sheet 9530. In Press

Sharpley, A. S., Nathan Slaton, Tom Tabler, Karl VanDevender, **Mike Daniels**, Frank Jones, and Tommy Daniel. 2009. Nutrient Analysis of Poultry Litter. University of Arkansas Division of Agriculture Cooperative Extension Service. Fact Sheet: 9529.

Pennington, John. **M.B. Daniels**, and Andrew Sharpley. 2008. Best Management Practices for Livestock Farms. University of Arkansas Division of Agriculture Cooperative Extension Service. Fact Sheet: 9527-PD-8-08N.

Pennington, John. **M.B. Daniels**, and Andrew Sharpley. 2008. Using the Watershed Approach to Maintain and Enhance Water Quality. University of Arkansas Division of Agriculture Cooperative Extension Service. Fact Sheet: 9526-PD-8-08N.

Daniels, M.B., Brian Haggard, and Andrew Sharpley. 2007. Arkansas Watersheds. University of Arkansas Division of Agriculture Cooperative Extension Service. Fact Sheet: 9521-PD-4-07N

Wilson, M.L., P. Fisk, M. Steele, **M.B. Daniels**, and A. Baber. 2007. An Overview of Regulations for Nutrient Management on Livestock Farms in Arkansas. University of Arkansas Division of Agriculture Cooperative Extension Service. Fact Sheet: 9523.

Wilson, Melony, **M.B. Daniels**, N. Slaton, Tommy Daniel, and Karl VanDevender. 2006. Sampling poultry litter for nutrient content. University of Arkansas Division of Agriculture Cooperative Extension Service. Fact Sheet FSA9519-PD-9-06N.

Stone, Nathan and **M.B. Daniels**. 2006. Algal blooms, scums, and mats in ponds. University of Arkansas at Pine Bluff Cooperative Extension Service. Fact Sheet FSA9094-PD-7-06N

Daniels, M.B., Nathan Slaton, Leo Espinoza and Mortezza Mozzaferi. 2005. Soil Testing for Manure Management. Univ. of Arkansas. Coop. Ext. Ser. Fact Sheet FSA 1035.

Daniels, Mike, Tommy Daniel, and Karl VanDevender. 2005. Phosphorus-based Nutrient Management Planning. Univ. of Arkansas Coop. Ext. Ser. Fact Sheet #FSA9516. (Original)

Daniels, Mike, Tommy Daniel, and Karl VanDevender. 2005. Nutrients and Water Quality Concerns. Univ. of Arkansas Coop. Ext. Ser. Fact Sheet #FSA9517. (Original)

Espinoza, Leo, N. Slaton, M Mozaffari, and **M.B. Daniels**. 2005. The Use of Poultry Litter in Row Crops. Univ. of Arkansas Coop. Ext. Ser. Fact Sheet #FSA2147-2M-4-05N. (Original)

Espinosa, Leo, Rick Norman, Nathan Slaton, and **Mike Daniels**. 2005. The nitrogen and phosphorus cycles. Univ. of Arkansas. Coop. Ext. Ser. Fact Sheet FSA2148-2M-10-05N

Daniels, M.B., Tom Riley, Karl VanDevender, Adrian Baber, Wavy Austin, and Helen Denniston. 2005. Introduction to Nutrient Management Planning. The Arkansas Nutrient Management Planner's Guide. Chapter 1.

Daniels, M.B., Karl VanDevender, and Tommy Daniel.2005. Nutrient Management and Water Quality Concerns. The Arkansas Nutrient Management Planner's Guide. Chapter 2.

Daniels, M.B., Karl VanDevender, Adrian Baber, Helen Denniston, and Wavy Austin. 2005. Developing a Nutrient Management Plan. The Arkansas Nutrient Management Planner's Guide. Chapter 4. Wilson, Melony, **M.B. Daniels**, and Adrian Baber. 2005. Farm Assessment and Inventory. 2005. The Arkansas Nutrient Management Planner's Guide. Chapter 5.

Daniels, M.B., Melony Wilson, and Adrian Baber. 2005. Predicting Soil Loss in Arkansas using the Revised Universal Soil Loss Equation. The Arkansas Nutrient Management Planner's Guide. Chapter 6.

Daniels, M.B., Tommy Daniel, and Karl VanDevender. 2005. Phosphorus-based Nutrient Management Planning. The Arkansas Nutrient Management Planner's Guide. Chapter 7.

Karl VanDevender and **M.B. Daniels**. 2005. Developing an Overall Farm Nutrient Inventory, Needs, and Budget. The Arkansas Nutrient Management Planner's Guide. Chapter 8.

Daniels, M.B., Melony Wilson, Helen Denniston, and Wavy Austin. 2005. Recommending Conservation Practices In Nutrient Management Plans. The Arkansas Nutrient Management Planner's Guide. Chapter 9.

VanDevender, K., **Mike Daniels**, and Melony Wilson. 2005. Recordkeeping. The Arkansas Nutrient Management Planner's Guide. Chapter 10.

Daniels, M.B., Melony Wilson, and Adrian Baber. 2005. Introduction to Nutrient Applications in Nutrient Surplus Areas. The Arkansas Nutrient Applicator's Guide. Chapter 1.

Daniels, M.B., Karl VanDevender, and Adrian Baber. 2005. Water Quality Concerns from Excessive Nutrients. The Arkansas Nutrient Applicator's Guide. Chapter 2.

Daniels, M.B., Karl VanDevender, and Melony Wilson. 2005. Principles of Application. The Arkansas Nutrient Applicator's Guide. Chapter 4.

VanDevender, Karl, **Mike Daniels**, Phil Tacker, and Gary Huitink. 2005. Calibrating Nutrient Application Equipment. The Arkansas Nutrient Applicator's Guide. Chapter 5.

VanDevender, K., Melony Wilson, and **Mike Daniels**. 2005. Recordkeeping for Livestock Producers. The Arkansas Nutrient Applicator's Guide. Chapter 6.

Buckner, Edmond R., L. Richardson, R. Felsman, **M.B. Daniels**, and S.O. Dennis. 2006. Environmental issues for small swine producers. University of Arkansas at Pine Bluff Cooperative Extension Service. Fact Sheet FSA9518-PD-10-06N.

Daniels, Mike, Karl VanDevender, and Tom Riley. 2004. Nutrient Management Planning for Livestock Operations: An Overview. FSA9515-1.5M-5-04N

Coblentz, Wayne, **Mike Daniels**, Jon Gunsaulis, Katie Teague, and Julie Speight. 2004. Using Bermudagrass Forage Systems to Mine Phosphorus from High Soil-Test Phosphorus Soils. FSA9514-2M-3-04N

VanDevender, K., J. Langston, and **M.B. Daniels**. 2000. Utilizing dry poultry litter – An overview. Univ. Of Ark. Coop. Ext. Ser. Fact Sheet FSA8000.

Daniels, M. B., T. Daniel, D. Carman, R. Morgan, J. Langston, K. VanDevender. Soil Phosphorus Levels: Concerns and Recommendations. 1999. Univ. of Arkansas Coop. Ext. Ser. Fact Sheet #FSA1029-4M-6-98-N.

Teague, W.R., M. Garner, **M.B. Daniels**, H.D. Scott. 1999. GPS/Map Position Coordinate Issues: GPS Position Accuracy. Univ. of Arkansas Coop. Ext. Ser. Fact Sheet FSA1033-1M-2-99N.

Teague, W.R., M. Garner, **M.B. Daniels**, H.D. Scott. 1999. GPS/Map Position Coordinate Issues: Latitude/Longitude in Arkansas. Univ. of Arkansas Coop. Ext. Ser. Fact Sheet FSA1031-1M-2-99N.

Teague, W.R., M. Garner, **M.B. Daniels**, H.D. Scott. 1999. GPS/Map Position Coordinate Issues: Datum and Coordinate Settings. Univ. of Arkansas Coop. Ext. Ser. Fact Sheet FSA1032-1M-2-99N.

Chapman, S.L., and **M.B. Daniels**. 1998. Test your soil for plant food and lime needs. Univ. of Arkansas Coop. Ext. Ser. Fact Sheet FSA2121.

Huitink, G., P. Tacker, J. Sills, **M.B. Daniels**, J. C. Boles. 1998. Soil Erosion and Clear Stream water. 1998. Univ.of Arkansas Coop. Ext. Ser. Fact Sheet #FSA1028-5M-4-98N.

Teague, W.R., H.D. Scott, **M.B. Daniels**, and D. Gardisser. 1997. GIS and GPS Resources for Precision Agriculture. Univ. of Arkansas Coop. Ext. Ser. Fact Sheet #FSA1027-1M-5-97-N.

Unpublished Reports

Daniels, M.B., Pearl Webb and Lee Riley. 2020. 2019 Edge of Field Monitoring Results for Monitoring Stations AR0691302 01 (CONYER 1) and AR0691302 02 (CONYER 2). Submitted on behalf of Conyers Farms to USDA-NRCS in partial fulfillment of Conservation Activity 201. 26pp.

Daniels, M.B. Pearl Webb and Lee Riley 2020. 2019 Edge of Field Monitoring Results for Monitoring Stations AR0691301 01 (TAYLOR 1) and AR0691301 02 (TAYLOR 2). Submitted on behalf of Reginald Taylor Farms to USDA-NRCS in partial fulfillment of Conservation Activity 201. 19pp.

Daniels, M.B. Pearl Webb and Lee Riley 2020. 2019 Edge of Field Monitoring Results for Monitoring Stations AR1231301 01 (BELL1) and AR1231301 02 (BELL2). Submitted on behalf of Ellis Bell Farms to USDA-NRCS in partial fulfillment of Conservation Activity 201. 20pp. Daniels, M.B. Pearl Webb and Lee Riley 2020. 2019 Edge of Field Monitoring Results for Monitoring Stations AR0411301 (DUM1) and AR0411302 (DUM3). Submitted on behalf of C.B. Stevens Farm to USDA-NRCS in partial fulfillment of Conservation Activity 201. 30pp.

Daniels, M.B. 2020. 2019 Edge of Field Monitoring Results for Monitoring Stations AR0411301 (DUM2) and AR0411302 (DUM4). Submitted on behalf of C.B. Stevens Farm to USDA-NRCS in partial fulfillment of Conservation Activity 201. 30pp.

Daniels, M.B. 2019. 2018 Edge of Field Monitoring Results for Monitoring Stations AR0691302 01 (CONYER 1) and AR0691302 02 (CONYER 2). Submitted on behalf of Conyers Farms to USDA-NRCS in partial fulfillment of Conservation Activity 201. 26pp.

Daniels, M.B. 2019. 2018 Edge of Field Monitoring Results for Monitoring Stations AR0691301 01 (TAYLOR 1) and AR0691301 02 (TAYLOR 2). Submitted on behalf of Reginald Taylor Farms to USDA-NRCS in partial fulfillment of Conservation Activity 201. 19pp.

Daniels, M.B. 2019. 2018 Edge of Field Monitoring Results for Monitoring Stations AR1231301 01 (BELL1) and AR1231301 02 (BELL2). Submitted on behalf of Ellis Bell Farms to USDA-NRCS in partial fulfillment of Conservation Activity 201. 20pp.

Daniels, M.B. 2019. 2018 Edge of Field Monitoring Results for Monitoring Stations AR0411301 (DUM1) and AR0411302 (DUM3). Submitted on behalf of C.B. Stevens Farm to USDA-NRCS in partial fulfillment of Conservation Activity 201. 30pp.

Daniels, M.B. 2019. 2018 Edge of Field Monitoring Results for Monitoring Stations AR0411301 (DUM2) and AR0411302 (DUM4). Submitted on behalf of C.B. Stevens Farm to USDA-NRCS in partial fulfillment of Conservation Activity 201. 30pp.

Proceedings and Abstracts

Sharpley, Andrew, **Mike Daniels**, Kristofor Brye, Karl VanDevender and Timothy Kresse. 2015 Assessing the Impact of Farm Management on Water Quality: Can Science Really Change Public Perceptions. In: 70th Annual Soil and Water Conservation Society Annual Conference: Book of Abstracts. July 2015. Soil and Water Conservation Society, Ankeny, Iowa. Page 134.

Daniels, M.B., Andrew Sharpley, Chris Henry and Bill Robertson. 2015. Arkansas Discovery Farms: Increasing Water Sustainability with Irrigation Efficiency. In: 70th Annual Soil and Water Conservation Society Annual Conference: Book of Abstracts. July 2015. Soil and Water Conservation Society, Ankeny, Iowa. Page 148.

Daniels, M.B., Andrew Sharpley, and Chris Henry. 2015. Arkansas Discovery Farms: Monitoring Nutrient Loss in Runoff from Soybean Fields. In: 70th Annual Soil and Water Conservation Society Annual Conference: Book of Abstracts. July 2015. Soil and Water Conservation Society, Ankeny, Iowa. Page 149. **Daniels, M.B.**, Andrew Sharpley, and Chris Henry. 2015. Improving Irrigation Efficiency in Soybeans with Pipe Planner Design and a Surge Valve. In: 70th Annual Soil and Water Conservation Society Annual Conference: Book of Abstracts. July 2015. Soil and Water Conservation Society, Ankeny, Iowa. Page 167

Free, Amanda, Bill Robertson, Archie Flanders, Chris G. Henry, and **Mike Daniels**. 2015. Fieldprint calculator: Arkansas case study. In: Proceedings of 2010-2015 Beltwide Cotton Conferences, San Antonio, TX, January 5-7, 2015. The National Cotton Council and Cotton Incorporated. Page 679.

Robertson, Bill, Andrew Jordan, Amanda Free, **Mike Daniels**, and Chris Henry. 2015. Fieldprint calculator: documenting continuous improvement. In: Proceedings of 2010-2015 Beltwide Cotton Conferences, San Antonio, TX, January 5-7, 2015. The National Cotton Council and Cotton Incorporated. P 702.

Henry, Chris DeClerk, Rick Wimberley, **Mike Daniels**, Andrew Sharpley, Cory Hallmark, and Josh Hesselbein. 2015. Arkansas Discovery Farms: Improving Irrigation Efficiency in Soybean with Pipe Planner Design and a Surge Valve. In: Proceedings of the National Association of County Agricultural Agents' 100th Annual Meeting and professional Improvement Conference. July 12-16, 2015 Sioux Falls, South Dakota. Page 26.

Beckwith, G, **M.B. Daniels**, C. Hallmark, and J. Hesselbein. 2015. Nitrogen concentration in rice floodwater following fertilization. In: Proceedings of the National Association of County Agricultural Agents' 100th Annual Meeting and professional Improvement Conference. July 12-16, 2015 Sioux Falls, South Dakota. Page 34.

Daniels, M.B., Katie Teague, D. Saraswat and K. VanDevender. 2015. The Arkansas Watershed Steward Program: National Finalist for Learning Module in Communications Contest. In: Proceedings of the National Association of County Agricultural Agents' 100th Annual Meeting and professional Improvement Conference. July 12-16, 2015 Sioux Falls, South Dakota. Page 117.

Daniels, M.B., A. Sharpley, C. Henry, P. Daniel, and S. Hirsh. 2012. The Arkansas Discovery Farms Program. In Proceedings of the 2012 Mississippi Water Resources Conference. Pages 139-148. Jackson MS. April 2012. (Wayne Wilkerson, Editor). The Mississippi Water Resources Institute. PDF of paper available at http://www.wrri.msstate.edu/pdf/2012 wrri proceedings.pdf

Daniels, M.B., S.L. Chapman, N. Slaton, and W.H. Baker. 2000. Soil fertility research and extension in Arkansas. In *Proceedings of the 2000 Southern Soil Fertility Conference*. M. Rasnake (editor). The Samuel Roberts Noble Foundation. Ardmore, Oklahoma.

Chapman, S.L, **M.B. Daniels**, and W. Johnson. 1999. Soil Fertility Research and Extension Activities in Arkansas. In *Proceedings of the Southern Soil Fertility Conference* (M. Rasnake, ed.). Pp 81-82. Memphis TN. The Samuel Roberts Noble Foundation. Ardmore, OK. **Daniels, M. B.**, T. Daniel, D. Carman, R. Morgan, J. Langston, K. VanDevender. Soil Phosphorus Levels: Concerns and Recommendations. 1998. In *Proceedings of the 1998 National Poultry Waste Management Symposium*. John Blake and Paul Peterson (editors). The National Poultry Waste Management Symposium Committee. Pp. 133-141.

Daniels, M.B., T.L. Riley, and Bill Kinkaid. 1999. Addressing Water Quality Issues in Bayou Bartholomew through Land Owner Education. In *Proceedings: 1999 Arkansas Water Resources Center – EPA Region 6 Joint Annual Conference*. (K.F. Steele, ed.). Arkansas Water Resources Center, Fayetteville AR. (Regional – Presenter)

Griffin, B. **M.B. Daniels**, and B. Robertson. 1999. Temporal Variability in Soil Test Analysis in Conventional and No-Till Cotton. In 1999 *Proceedings of the Beltwide Cotton Conferences*. Pp. 1293. Orlando FL. Cotton Council of America. (National)

Chapman, S. L., **M.B. Daniels**, and J. Clemons. 1998. Practical Applications of Grid Soil Sampling in Arkansas. In *Proceedings of the 1998 Southern Soil Fertility Conference*. G.V. Johnson (editor). The Samuel Roberts Noble Foundation. Ardmore, Oklahoma. (Regional)

Daniels, M. B., S. L. Chapman, R. Matlock, and A. Winfrey. Using Grid Soil Sampling in the Management of Problem Soils. 1998. In *Proceedings of the 21st Annual Southern Conservation Tillage Conference for Sustainable Agriculture*. Terry Keisling (editor). Arkansas Agricultural Experiment Station. University of Arkansas Special Report 186. Pp. 19-21.

Chapman, S. L., **M.B. Daniels**, and J. Clemons. 1998. Practical Applications of Grid Soil Sampling in Arkansas. In *Proceedings of the 1998 Southern Soil Fertility Conference*. G.V. Johnson (editor). The Samuel Roberts Noble Foundation. Ardmore, Oklahoma.

Mullen, M.D., K.E. Simmons, D.D. Tyler, B.N. Duck, **M.B. Daniels**, G.V. Wilson and J.K.Bernard. 1993. Water quality in no-tillage systems with no prior manure applications. In *P.K. Bollich (Ed.) Proc. of 1993. Southern Conservation Tillage Conference for Sustainable Agriculture*. Monroe, LA, 15-17 June 1993. Pages 135-140.

Simmons, K.E., **M.B. Daniels**, M.D. Mullen, D.D. Tyler, B.N. Duck, G.V. Wilson, and J.K. Bernard. 1993. Water quality in no-tillage systems following long-term manure applications. *In P.K. Bollich (Ed.) Proc. Of 1993 Southern Conservation Tillage Conference for Sustainable Agriculture*. Monroe, LA, 15-17 June 1993. Pages 141-144.

Editor of Extension Manuals (3)

Pennington, J., **M.B. Daniels, T. Riley, K. VanDevender, K. Teague, K. Higgins, D. Saraswat, and R. Fields.** 2013. Arkansas Watershed Steward Handbook: A water resources training curriculum. University of Arkansas Division of Agriculture Cooperative Extension Service. Publication no. AG1290. 2301 S. University Ave. Little Rock AR, 72204. http://ppc.uaex.edu/research_publications/ag1290.pdf. 158 pp. **Daniels, M.B.**, Tom Riley, Karl VanDevender, Adrian Baber, Wavy Austin, and Helen Denniston. 2005. The Arkansas Nutrient Management Planner's Guide. Official State of Arkansas Certification Training Guide. 10 Chapters. Online Only

Daniels. 2005. The Arkansas Nutrient Applicator Guide. Official State of Arkansas Certification Training Guide. 6 Chapters. Online Only

Editor of Newsletters (4)

Daniels. *On the Bayou.* Official Extension Newsletter for the Bayou Bartholomew Watershed Education and Demonstration Project. Distributed via mail through 6 County Offices. Highlighted current research, conservation practices and programs to assist row crop farmers in protecting water quality.

Daniels. *On the Farm*. Official Extension Newsletter of the Arkansas Discovery Farm Program. Distributed electronically through all 75 County Extension offices in Arkansas.

Daniels. *Conservation Corner*. Official Arkansas Conservation Partnership Newsletter for the Mississippi Healthy River Basin Initiative (MRBI) Project. Distributed electronically through all County Extension offices, Conservation District offices and USDA Service Centers in Arkansas.

Daniels and Power, Co-Editors. *Confluence*. The Official Regional Water Quality News Letter for MRBI Project Area. Distributed electronically by Constant Contact to 13 States in the USDA Landscape Initiative MRBI project area. Nearly 2,000 Subscribers

INVITED PRESENTATIONS (Abbreviated List)

Daniels, M.B. 2020. Results from the Arkansas Discovery Farm Program. Presented at the 2020 Multi-State Discovery Farm Conference. Minneapolis MN. January 2020. Invited. (150 Attendees).

M.B. Daniels. 2020. SERA 46 Update. Presented at Hypoxia Task Force. February 4, 2020. EPA headquarters, Washington DC. Invited. (100 Attendees).

M.B. Daniels, Robinson and Ford: Perspective on Extension Water Programming in the Southeastern United States: A Survey of Agricultural and Natural Resource Extension Administrators. Presented at the 2020 Joint Meeting of PLN, AEA & ASRED. August 24-27, 2020. Virtual Event

Daniels and Sharpley. 2019. Nutrient losses from Row Crops. Presented at the AACD Annual Conference. Little Rock February 13 (Invited)

Daniels and Sharpley. 2019. Discovery Farm Update. Presented at the AACD Annual Conference. Little Rock February 13 (Invited)

Daniels. 2019. Leadership for Penn State Extension. Presented to Extension Faculty during my Interview for Associate Dean for Extension. March xxx. State College PA (Invited)

Daniels. 2019. The Arkansas Discovery Farm Program. Presented to the Laotian Agricultural Delegation including Prime Minister during U.S. Tour Organized by the National Agricultural Statistical Service. Little Rock, 8/19 (Invited)

Daniels and Sharpley. 2019. The Arkansas Discovery Farm Program and Agricultural Sustainability. Presented at the National Animal Discussion Group. Hosted by Tyson's in Fayetteville AR, 8/8. (Invited).

Daniels and Sharpley. 2019. Arkansas Discovery Farm Experience for Managing Phosphorus on Arkansas Poultry Farms. Presented as part of the National Livestock and Poultry Environmental Learning Center Webinar: Lessons Learned from the Field on Phosphorus. <u>https://lpelc.org/phosphorus-management-lessons-learned-from-the-field/</u>. Webinar 12/13. (invited).

Daniels, M.B. 2018. What Traits do I want in a Leader? Commencement Address presented at the LEAD21 Class 13 Graduation Ceremony. LEAD21 Leadership Workshop. January 20 – 22. Arlington Virginia. (Selected by LEAD21 Training Staff to present Commencement Address)

Daniels, M.B. 2018. Reducing Agricultural Water Use through Research and Education. Presented at the Annual Arkansas Association of Conservation District Conference. (Invited as Panel Speaker on "Status of Water Availability for Agriculture").

Stevens, Steve and **Mike Daniels**. 2018. Results from the Cotton Discovery Farm. Presented at the Arkansas Crop Protection Conference. January 18, 2018. NLR Wyndam. (Invited: Assisted Steve with Powerpoint and data analysis)

Daniels, M.B. and Andrew Sharpley. 2018. Results from the Arkansas Discovery Farm Program. Presented at the Annual EPA Region VI Managers Workshop. (Invited). November 18, 2018. Dallas, TX.

Daniels. 2017. Healthy Soils for Healthy Waters Workshop Summarization and Thoughts. Presented at the NACD National Conference's Healthy Soil for Healthy Water Workshop. January 31, 2017. Denver CO. 50 Attendees. (Invited - Reviewed)

Daniels. 2017. Results from the Arkansas Row Crop Discovery Farms. Presented at the Mississippi Cover Crop Symposium, Jason Krutz, Chair. Stoneville, MS Nov. 28. 100 attendees. (Invited)

Daniels. 2017. Results from the Arkansas Row Crop Discovery Farms. Presented at the Southern Soil Health and Water Management Conference. Debbie Moreland and Robbie Bevis, Co-Chairs. North Little Rock. Dec. 12. 75 Attendees. (Invited)

Daniels. 2016. Nutrient Management Planning for Eastern Arkansas. Presented at the Annual State Conference of the Arkansas Association of Conservation Districts. Feb 17. North Little Rock. Invited.

Daniels, M.B., A. Sharpley, C. Hallmark, L Riley and L. Berry. 2016. The Arkansas Discovery Farm Program Monitors On-Farm Water Quality. Presented at American Farm Bureau National Policy Development Conference. Washington DC. February 21-22. Invited.

Daniels and Sharpley. 2016. Overview of the Arkansas Discovery Farm Program. Presented at the Southern Farm and Gin Trade Show at the Awards Ceremony. Memphis. Feb. 26. Invited.

Daniels. Results from Arkansas Discovery Farm for Soybeans. 2016. Presented at the North Central Regional Soybean Board Meeting, Memphis---April 19. Invited

Daniels. The Arkansas Discovery Farm Program Results. 2016. Presented at the National Rural Water Association Annual Conference. Little Rock---June 21. Invited

Daniels. Overview of the Arkansas Discovery Farm Program. 2016. Luncheon Speaker. South Central National Association of Conservation Districts Annual Meeting. Little Rock---August 11. Invited

Daniels. Overview of the Arkansas Discovery Farm Program. 2016. National Association of Conservation Districts Executive Directors Annual Conference---Little Rock---September 27. Invited

Daniels. 2016. Overview of the Structure and Function of the Division of Agriculture. Presented to the Cuban Farm Delegation Tour organized by the WinRock Int'1.---Little Rock---Oct. 17 (Invited)

Daniels. 2016. Results from the Arkansas Discovery Farm Program. Presented at the Southern Cover Crop, Soil Health and Water Management Conference. Jonesboro---Dec. 14. (Invited)

Daniels, M.B. 2016. Effects of Cover Crops on Water Quality. Presented at the Arkansas State Univ. Soil and Water Conference. Jan. 27 – Jonesboro Invited.

Daniels, M.B., A. Sharpley, C. Hallmark, L Riley and L. Berry. 2016. The Arkansas Discovery Farm Program Promotes Conservation Through Partnerships. Presented at the National Association of Conservation Districts Annual Conference. Reno, Nevada Jan, 30 – Feb 3. Invited.

Daniels, M.B. 2015. The future of soil and water in Arkansas. Presented at the Arkansas Crop Protection Conference, January 21, 2015. North Little Rock Wyndham. North Little Rock, AR. (State - Invited – 175 attendees)

Daniels, M.B. 2015. East Arkansas Poultry Litter: Challenges and Opportunities. Presented at the Arkansas Association of Conservation Districts Annual Conference. North Little Rock (Invited – 50 Attendees)

Daniels, Mike. 2015. Row Crop Discovery Farm Results. Presented at the Arkansas Soil and Water Board of Commissioners Meeting---September 16, Fayetteville (State-Invited, 75 Attendees)

Daniels, Mike. 2015. Nutrient Management Planning in Arkansas. 2015. Presented at the Joint Committee of Agriculture, Forestry and Economic Development of the State Assembly.— September 17, Fayetteville (State-Invited, 75 Attendees)

Daniels, Mike and Andrew Sharpley. 2015. An Update on Discovery Farms and Big Creek Monitoring. Presented to the Agricultural Development Council. December 16, Systems Office. (State-Invited, 20 Attendees).

Daniels, M.B. and Andrew Sharpley. 2015. Arkansas Discovery Farm Results. Presented at the Healthy Soils for Healthy Waters Conference. May 18, Columbus Ohio (Presented via webinar since I could not be there in person). Invited – 100 attendees.

Daniels, Mike. 2015. The Future of Soil and Water in Arkansas. Presented (Twice) at the 2015 Arkansas Crop Management Conference. January 21, 2015. North Little Rock, AR (Invited – State, 175 Attendees).

Daniels, Mike, Mike Hamilton and Chris Henry. 2015. Computerized Hole Selection for Furrow Irrigation with Poly Pipe. Presented at the 2015 Arkansas State University Soil and Water Conference. January 30, 2015. Jonesboro, AR. (Invited – State 150 Attendees)

Daniels, Mike. 2015. The Arkansas Discovery Farm Program. Presented at the National SARE Field Tour for County Agents. –June 11, Atkins AR (Invited – Nat'l, 22 Attendees)

Daniels, Mike and Andrew Sharpley. 2015. The Arkansas Discovery Farm Program. Presented at the Arkansas Water Resources Annual Conference.—July 21, Fayetteville (State-Invited, 150 Attendees)

Daniels, Mike. 2015. Building Successful Partnerships. Presented at the Southwest States Resource Conservation & Development Councils, Inc. Annual Conference. ---September 23, North Little Rock. (Invited-Regional, 35 Attendees)

Daniels, Mike. 2015. Understanding the Big Picture: Relating Water Quantity and Quality Issues in Eastern Arkansas. Presented at the Southern Cover Crop and Water Management Conference.---October 29, Jonesboro. (Invited-Regional, 175 Attendees)

Daniels, M.B., and A. Sharpley. 2014. Empowering Landowners to address nutrient loss through the Arkansas Discovery Farm Program. Presented at the 2014 Spring Hypoxia Task Force Meeting. Panel Speaker for the Importance of Nutrient Reduction Activities by Private

Landowners Panel. May 22, 2014. Little Rock, AR. 125 Attendees (Regional – Invited). http://water.epa.gov/type/watersheds/named/msbasin/meetings.cfm

Daniels, M.B., Mike Sullivan, Debbie Moreland, Andrew Sharpley, Michele Reba, Yushun Chen, Alice Weeks and Dianne Schenkler. 2014. Utilizing the MRBI, the Arkansas Discovery Farm Program and Partnerships to Promote Soil and Water Conservation Arkansas. Presented at the 2014 Conference on Ecological and Ecosystem Restoration: A Collaborative Effort of NCER and SER. July 28-31. New Orleans, LA. 40 Attendees. (National – Invited) http://www.conference.ifas.ufl.edu/CEER2014/

Daniels, M.B., and A. Sharpley. 2014. An update on the Arkansas Discovery Farm Program. Presented at the Four-State Discovery Farm Meeting. LaCrosse. WI. 35 Attendees. (Multi-State – Invited)

Daniels, M.B., and A. Sharpley. 2014. The Arkansas Discovery Farm Program. Presented at the Healthy Soils for Healthy Water Workshop. September 14 – 16. Columbus Ohio. Sponsored by Ohio State University and Greenleaf Advisors. 20 Attendees. (Regional – Invited) <u>http://symposium.greenleafadvisors</u>.

CONFERENCE PRESENTATIONS

Daniels and Taylor. 2020. 15 years of no-till and cover crops. Presented on Jan 30; Jan. 31 at 2020 Cotton and Rice National Conservation Systems Conference. Accepted (50 Attendees)

Daniels, Sharpley, Webb, Riley and Berry. 2020. Educational Aspects of the Arkansas Discovery Farm Program. Presented at the Expanding Horizons: Where Conservation Meets Innovation: 75th International Annual Conference. July 27-29, 2020. Virtual Event.

Daniels and Mike Wood (Producer). 2019. Using Surge Irrigation and Moisture Sensors to Increase Irrigation Efficiency. Rice and Cotton Conservation Technology Conference. January 2019 Baton Rouge, LA. (Selected)

Daniels and Sharpley. 2019. Results from the Arkansas Discovery Farm Program: Nutrient Losses from Cropland. Presented at the Southern Region Extension Water Conference. Texas A&M University, July 25, 2019. (Selected for Oral Presentation)

Daniels. 2017. Contrasting Voluntary and Regulatory Approaches to Water Quality: A Comparison of Extension Programs. Presented at the National Extension JCEP Annual Leadership Conference. Feb. 8, Orlando, FL. 25 Attendees. (Reviewed: 1 of 35 presentations selected out of 78 proposals)

Daniels, M.B., Andrew Sharpley, Bill Robertson, Lee Riley and Brittany Singleton. 2018. Arkansas Discovery Farm as a Platform for Conservation Education. Poster presented At 73rd SWCS International Annual Conference July 29-August 1, 2018. Albuquerque Convention Center. **Daniels, M.B.**, Andrew Sharpley, Bill Robertson, Lee Riley and Brittany Singleton. 2018. Arkansas Discovery Farm Results for Cotton. Poster presented At 73rd SWCS International Annual Conference July 29-August 1, 2018. Albuquerque Convention Center.

Daniels. 2017. Results from the Arkansas Row Crop Discovery Farms. Presented at the 72nd Annual International Conference of the Soil and Water Conservation Society. Part of the Symposium: Public–Privative Conservation Partnerships Promote Conservation in Arkansas that Empower Environmental Stewardship among the Agricultural Community: Fostering Success and Overcoming Challenges - Teri Nehls, USDA-NRCS, Chair. Madison WS. August 2. 25 attendees. (Invited – Reviewed))

Daniels, M.B., Mike Sullivan, Debbie Moreland, Andrew Sharpley, Michele Reba, Yushun Chen, Alice Weeks and Dianne Schenkler. 2014 Utilizing the MRBI, the Arkansas Discovery Farm Program and Partnerships to Promote Soil and Water Conservation Arkansas. In Conference Abstracts of the 2014 Conference on Ecological and Ecosystem Restoration: A Collaborative Effort of NCER and SER. July 28-31. New Orleans, LA. Page 91. http://www.conference.ifas.ufl.edu/CEER2014/Abstract%20book.pdf

Daniels, M.B., Andrew Sharpley, Debbie Moreland, **Karl VanDevender**, Patrick Fisk and Adrian Baber. 2012. Impact of Nutrient Management Planning in Arkansas. Presented at the 67th International Annual Conference of the Soil and Water Conservation Society: Choosing Conservation: Considering Ecology, Economics and Ethics. Ft. Worth, TX. July 22-25, 2012. Abstract Available at:

http://www.swcs.org/documents/filelibrary/12ac/2012_Abstract_Book_7B7F4A470290D.pdf, page 52.

Lawson, R.L., A. Sharpley, M.B. Daniels (Presenter) and P. Daniel. 2012. The Arkansas Discovery Farms Program: A general overview. Presented Wednesday May 23, 2012 in Session A1.Agricultural BMPs at the USDA-NIFA 2012 National Land Grant and Sea Grant Water Conference. Portland OR. May 20 – 24. Abstract available at http://www.usawaterquality.org/conferences/2012/abstracts/Asession/lawson.pdf.

Daniels, M.B., Andrew Sharpley, Pearl Daniel and Raven Lawson. 2012. Empowering Arkansas Farmers through the Discovery Farm Program. Presented as part of Workshop R5: Discovery Farms: Monitoring Runoff from Real, Working Farms and Empowering Farmers conducted on Thursday May 24, 2012 and Raven Lawson. 2012. Arkansas Discovery Farms: Row Crop Production. Presented at the USDA-NIFA 2012 National Land Grant and Sea Grant Water Conference. Portland OR. May 20 – 24. Abstract available at http://www.usawaterquality.org/conferences/2012/poster%20abstracts/Daniel.pdf

Anderson, Jim, Dennis Busch, and **M.B. Daniels (Presenter)**. 2012. Two regions form and link monitoring workgroups. Presented at the 67th International Annual Conference of the Soil and Water Conservation Society: Choosing Conservation: Considering Ecology, Economics and Ethics. Ft. Worth, TX. July 22-25, 2012 as part of the Symposium: Advances and Challenges in

Monitoring Water at the Field Edge: Methods and Case Studies. Abstract Available at: http://www.swcs.org/documents/filelibrary/12ac/2012 Abstract Book 7B7F4A470290D.pdf, page 15.

Daniels, M.B., Andrew Sharpley, Pearl Daniel and Raven Lawson. 2012. Empowering Arkansas Farmers through the Discovery Farm Program. Presented at the 67th International Annual Conference of the Soil and Water Conservation Society: Choosing Conservation: Considering Ecology, Economics and Ethics. Ft. Worth, TX. July 22-25, 2012 as part of the Symposium: Discovery Farms: Monitoring runoff from real, working farms. Abstract Available at: http://www.swcs.org/documents/filelibrary/12ac/2012 Abstract Book 7B7F4A470290D.pdf, page 27.

Daniels, M.B., Andrew Sharpley, Pearl Daniel and Raven Lawson. 2012. Arkansas Discovery Farms: Empowering Producers and Stakeholders in Environmental Solutions. Presented at the 2012 ASA-CSSA-SSSA International Annual Meetings. Tuesday October 22, 2012. Extension and Education Session: Extension Methods that Work II. Cincinnati, OH. Abstract 212-9. http://scisoc.confex.com/scisoc/2012am/webprogram/Paper73157.html

Daniel, Pearl and M.B. Daniels, 2012. Arkansas Water Sustainability Website. Presented at the USDA-NIFA 2012 National Land Grant and Sea Grant Water Conference. Portland OR. May 20 -24. Abstract available at

http://www.usawaterquality.org/conferences/2012/poster%20abstracts/Daniel 2.pdf

Daniel, Pearl, M.B. Daniels, Andrew Sharpley, and Raven Lawson. 2012. Arkansas Discovery Farms: Row Crop Production. Presented at the USDA-NIFA 2012 National Land Grant and Sea Grant Water Conference. Portland OR. May 20 – 24. Abstract available at http://www.usawaterguality.org/conferences/2012/poster%20abstracts/Daniel.pdf

Daniel, Pearl, M.B. Daniels, Andrew Sharpley, and Raven Lawson. 2012. Arkansas Discovery Farms: Row Crop Production. Presented at the 67th International Annual Conference of the Soil and Water Conservation Society: Choosing Conservation: Considering Ecology, Economics and Ethics. Ft. Worth, TX. July 22-25, 2012. Abstract available at: http://www.swcs.org/documents/filelibrary/12ac/2012 Abstract Book 7B7F4A470290D.pdf, page 115.

Herron, S., Andrew Sharpley, M.B. Daniels, Susan Watkins⁴ and David Miller. Managing Phosphorus Runoff From Around Poultry Production Facilities. Presented at the 2012 ASA-CSSA-SSSA International Annual Meetings. Tuesday October 22, 2012. Cincinnati, OH. Poster 2516.

http://scisoc.confex.com/scisoc/2012am/webprogram/Paper71247.html

Reba, M., M. Daniels, Y. Chen, A.N. Sharpley, T. Teague and J. Bouldin. 2013. A network for monitoring agricultural water quantity and water quality in Arkansas, Eos, Transactions of the American Geophysical Union, Fall Meeting Supplement, Abstract H31G-1204. San Francisco, CA. December 6 – 13, 2013.

Sharpley, A.N., **M. Daniels**, N. Mays, and C. Hallmark. 2013. The Arkansas Discovery Farm Program: Connecting Science to the farm. From Waste to Worth: Spreading Science and Solutions. EXtension, Denver, CO. April, 2013. http://www.extension.org/pages/67692/the-arkansas-discovery-farm-program:-connecting-science-to-the-farm#.UqJUVPRDt8E

Daniels, Mike, Andrew Sharpley, Bill Robertson, Josh Hesselbein and Cory Hallmark. 2015. The Arkansas Discovery Farm Program for Cotton. Presented at the Beltwide Cotton Conference January 5-7, 2015 Marriott River center Hotel San Antonio, Texas (Accepted – National; Presented by Bill Robertson).

Daniels, Mike, Andrew Sharpley, Bill Robertson, Cory Hallmark and Josh Hesselbein. 2015. Monitoring Nutrient Runoff from Cotton on the Arkansas Cotton Discovery Farm. Presented at the Beltwide Cotton Conference January 5-7, 2015 Marriott River center Hotel San Antonio, Texas (Accepted – National; Presented by Bill Robertson).

Daniels, M., Chris G Henry, Andrew Sharpley, Bill Roberston, Leo Espinoza, Josh Hesselbein and Cory Hallmark. 2015. Documenting Irrigation Efficiency for Cotton via the Arkansas Discovery Farms. Presented at the Beltwide Cotton Conference January 5-7, 2015 Marriott River center Hotel San Antonio, Texas (Accepted – National; Leo Espinoza presented)

Free, Amanda, Bill Robertson, **Mike Daniels** and Chris G Henry. 2015. Fieldprint Calculator: Arkansas Case Study. Presented at the Beltwide Cotton Conference January 5-7, 2015 Marriott River center Hotel San Antonio, Texas (Accepted – National).

Robertson, Bill, Andrew Jordan, Amanda Free, **Mike Daniels** and Chris G Henry. 2015. Fieldprint Calculator: Documenting Continuous Improvement. Presented at the Beltwide Cotton Conference January 5-7, 2015 Marriott River center Hotel San Antonio, Texas (Accepted – National).

Daniels, Mike, Andrew Sharpley, Josh Hesselbein and Cory Hallmark. 2015. Empowering Rice Farmers to Address Water Quality Concerns through the Arkansas Discovery Farms Program. Presented at the 18th Annual National Conservation Systems Cotton and Rice Conference. Jan. 14-16, 2015. Baton Rouge, LA (National)

Wood, Mike and **Mike Daniels**. 2015. A Producer's View of the University Of Arkansas' Discovery Farm Program. Presented at the 18th Annual National Conservation Systems Cotton and Rice Conference. Jan. 14-16, 2015. Baton Rouge, LA (National)

Stevens, Steve, Mike Daniels and Bill Robertson. 2015. Arkansas Cotton Discovery Farms: Year Two Results. Presented at the 18th Annual National Conservation Systems Cotton and Rice Conference. Jan. 14-16, 2015. Baton Rouge, LA (National)

Beckwith, G., **Mike Daniels**, Cory Hallmark and Josh Hesselbein. 2015. Nitrogen Concentration in Rice Flood Water Following Fertilization Application. Presented at the 18th Annual National Conservation Systems Cotton and Rice Conference. Jan. 14-16, 2015. Baton Rouge, LA (National) **Daniels, M.B.** 2013. We Paved Paradise and Put up a Parking Lot: A Master Gardner's Guide to Storm water Management. Presented at the International Master Gardener Conference. Juneau, Alaska. September 8, 2013. 25 Attendees. (Selected and Peer Reviewed, International)

To Extension Audiences (Abbreviated List; Over 450 total presentations have been made) **Daniels, Mike**. 2015. Results from the Arkansas Discovery Farms. Presented at the Division of Agriculture's Crops In-Service Training. December 8. Forest City. (State-Volunteered, 75 Attendees)

Daniels, Mike. 2015. We Paved Paradise and Put up a Parking Lot: Addressing Urban Storm Water with Soil and Water Science. Presented to the Central High School Science Class. January 21, 2015. Little Rock, AR. (Volunteer, 50 Students)

Sharpley, VanDevender and **Daniels**. 2015. The C&H Farm and Big Creek Study. Presented to the Farm Bureau Environmental Issues Committee, Terry Dabbs- Chair. ---June 25 Little Rock (Invited-State, 25 Attendees)

Daniels, Mike. 2015. Agriculture and Nonpoint source pollution. Presented at the University of Arkansas' Division of Agriculture's Public Policy Center's Nonpoint Source Pollution Seminar – September 3, LRSO (Invited-State, 13 Attendees)

Daniels, Mike. 2015. Agriculture and Nonpoint source pollution. Presented at the University of Arkansas' Division of Agriculture's Public Policy Center's Nonpoint Source Pollution Seminar – October 15, Jonesboro (Invited-State, 11 Attendees)

Daniels, Mike and Andrew Sharpley. Results from the Arkansas Discovery Row Crop Farms. Presented at the Arkansas Discovery Farm Review Meeting. Feb. 13 – Little Rock (20 attendees)

Daniels, Mike. The future of soil and water in Eastern Arkansas. Presented at the Arkansas Irrigation Expo. March 10 – Stuttgart (Invited – 180 Attendees)

Daniels, Mike. 2015. Reducing Soil erosion and protecting water quality with cover crops. Presented at the UA Division of Agriculture Cover Crop Conference. March 12 – Stuttgart (Invited – 175 people)

Daniels, Mike. And Andrew Sharpley 2015. Arkansas Discovery Farm Progress Report. Presented to Arkansas Soybean Promotion Board. March 18 (Invited – 30 attendees)

Daniels, Mike. 2015. Extension Soil and Water Conservation Report. Presented to the Arkansas Natural Resources Commission Board Meeting – May 20, Little Rock

Daniels, Mike. 2015. Water Quality Educational Programs. Presented to high school math and science teachers. STEM Workshop. – June 10, Arkadelphia (Invited 23 Attendees)

Daniels and Sharpley. 2015. The Arkansas Discovery Farm Program. Presented to the Farm Bureau Environmental Issues Committee, Terry Dabbs- Chair. ---June 25 Little Rock (Invited-State, 25 Attendees)

Daniels, M.B. 2015. We paved paradise and put up a parking lot: A primer to urban storm water management. Presented to the Little Rock Central High Science Class. January 21, 2015. Little Rock, AR. (40 Attendees.)

Daniels, M.B. and T.L. Riley. 2014. State Water Plan Update: What it means for Row Crop Producers. Presented at the Arkansas Corn and Grain Sorghum Promotion Board Conference. January 7, 2014. Jonesboro. 150 Attendees. (Invited, Multi-County)

Daniels, M.B. And T.L. Riley. 2014. State Water Plan Update: What it means for Row Crop Producers. Presented at the Arkansas Corn and Grain Sorghum Promotion Board Conference. January 9, 2014. Dumas. 50 Attendees. (Invited, Multi-County)

Daniels, M.B. 2014. Nutrient Applicator Laws in Arkansas. Presented at the Madison County Nutrient Applicator Training Program. February 14, 2014. Huntsville. 20 Attendees (County)

Daniels, M.B. 2014. Soil Fertility. Presented at the Madison County Nutrient Applicator Training Program. February 14, 2014. Huntsville. 20 Attendees (County)

Daniels, M.B. 2014. Nutrient Application Principals in Nutrient Surplus Areas. Presented at the Madison County Nutrient Applicator Training Program. February 14, 2014. Huntsville. 20 Attendees (County)

Daniels, M.B. 2014. Calibrating Application Equipment. Presented at the Madison County Nutrient Applicator Training Program. February 14, 2014. Huntsville. 20 Attendees (County)

Daniels, M.B. 2014. Record keeping Requirements for Nutrient Applicators. Presented at the Madison County Nutrient Applicator Training Program. February 14, 2014. Huntsville. 20 Attendees (County)

Daniels, M.B. 2014. Walk your Farm to Understand Natural Resources. Presented at the Perry / Faulkner County Grow Your Farm Program. February 17, 2014. Conway. 25 Attendees. (Invited - Multi-County)

Daniels, M.B. 2014. How to Judge Land for FFA Contests. Presented at the North Central AACD FFA Training Program. February 19, 2014. Batesville. 75 Attendees. (Invited - Multi-County)

Daniels, M.B. 2014. Developing a Nutrient Management Plan. Presented at the Nutrient Management Planner's Continuing Ed. For Certification. April 2. Little Rock. 25 Attendees. (Multi-County)

Daniels, M.B. 2014. Best Management Practices for Nutrient Management Plans. Presented at

the Nutrient Management Planner's Continuing Ed. For Certification. April 2. Little Rock. 25 Attendees. (Multi-County)

Daniels, M.B. 2014. Utilizing the Web Soil Survey for Writing Nutrient Management Plans. Presented at the Nutrient Management Planner's Continuing Ed. For Certification. April 2. Little Rock. 25 Attendees. (Multi-County)

Daniels, M.B. 2014. Managing Storm water as a Homeowner: Rain Gardens and Rain Harvesting. Presented at the Arkansas Association of Cooperative Extension Specialists Beans and Brains Luncheon Seminar Series). April 23. Little Rock. 50 Attendees. (Invited)

Daniels, M.B. 2014. State Water Plan Update: Implications for Row Crop Producers. Presented at the Farm Bureau Environmental Issues Committee Meeting. June 5. Little Rock. 15 Attendees. (Invited)

Daniels, M.B. 2014. Big Creek Research Project Update. Presented at the Farm Bureau Environmental Issues Committee Meeting. June 5. Little Rock. 15 Attendees. (Invited)

Daniels, M.B. 2014. Water Resource issues in Eastern Arkansas. Presented at the Southeast Area AACD Meeting. June 11. Monticello. 75 Attendees. (Invited-Multi-County)

Daniels, M.B. 2014. The Arkansas Discovery Farm Program and the Arkansas Learning Farm Program: Two Efforts Supporting Horticultural Producers. Presented at the Pulaski County Conservation District Horticultural Field Day. AACD Meeting. June 27. Butch Eggers Farm – Wye Mountain. 25 Attendees. (Invited- County)

Daniels, M.B. 2014. Utilizing Cover Crops to Enhance Soil Fertility. Presented at the Independence County Conservation District Cover Crop Meeting. June 30. Oil Trough. 15 Attendees. (Invited-County)

Daniels, M.B. 2014. State Water Plan Update: Implications for Rice Farmers. Presented at the UA-DOA Rice Expo. August 1. Stuttgart. 35 Attendees. (Invited-Multi County)

Daniels, M.B. 2014. Arkansas Discovery Farms: Row Crop Update. Presented at the UA-DOA Rice Expo to the Joint –Ag Committee for Agriculture. August 1. Stuttgart. 50 Attendees. (Invited-Multi County)

Daniels, M.B. 2014. Arkansas Discovery Farms: Row Crop Update. Presented at the Farm Bureau Environmental Issues Committee Meeting. October 11. Cave City. 20 Attendees. (Invited)

Daniels, M.B. 2014. The Arkansas Discovery Farm Program. Presented to the California Farm Bureau Leadership Program. November 6. Morrilton. 25 Attendees. (Invited by Arkansas Farm Bureau)

Daniels, M.B. 2014. Nutrient Management Planning Results for the Illinois River Watershed.

Presented at the Nutrient Management Planner's Continuing Ed. For Certification. November 18. Fayetteville. 25 Attendees. (Multi-County)

Daniels, M.B. 2014. Understanding Soil Test Results and Recommendations. Presented at the Nutrient Applicator's Continuing Ed. For Certification. November 18. Fayetteville. 15 Attendees. (Multi-County)

Daniels, M.B. 2014. Understanding Soil Test Results and Recommendations. Presented at the Nutrient Applicator's Continuing Ed. For Certification. December 9. Mena. 25 Attendees. (Multi-County)

Daniels, M.B. 2014. Nutrient Management Planning Results for the Illinois River Watershed. Presented at the Nutrient Management Planner's Continuing Ed. For Certification. December 11. Little Rock. 12 Attendees. (Multi-County)

Daniels, M.B. 2014. An update of the Arkansas Row Crop Discovery Farms. Presented to the East Central Area of the Arkansas Association of Conservation Districts' Annual Meeting. April 3. Wynne. 75 Attendees. (Multi-County - Invited)

Daniels, M.B. 2014. Water Resource issues in Eastern Arkansas. Presented at the Southeast Area AACD Meeting. June 11. Monticello. 75 Attendees. (Invited-Multi-County)

Daniels, M.B. 2014. Utilizing Cover Crops to Enhance Soil Fertility. Presented at the USDSA-NRCS Cover Crop Conference. October 29. Jonesboro. 150 Attendees. (Invited- Multi-County)

Daniels, M.B. 2014. The Arkansas Discovery Farm in the L'Anguille Watershed. Presented at the Arkansas Nonpoint Source Management Annual Meeting. Sep. 18. Little Rock (Invited – Statewide)

Daniels, M.B. 2014. The Arkansas Watershed Steward Program. Presented at the Arkansas Nonpoint Source Management Annual Meeting. Sep. 18. Little Rock (Invited – Statewide)

Daniels, Mike. 2014. The Arkansas Watershed Steward Workshop. Presented at the Arkansas Association of Conservation Districts Annual Conference. North Little Rock (Half Day workshop - Invited – 25 Attendees)

FIELD DAYS AND TOURS (Abbreviated List)

- Wal-Mart Sustainability Tour organized by the Division's Center for Agricultural and Rural Sustainability (Sharpley and Daniels). Fayetteville, June 8, 2011. 80 attendees.
- Discovery Farms Tour for the Farm Bureau Environmental Issues committee in Fayetteville
- (Sharpley and Daniels). Elkins, Sept. 2, 2011. 8 attendees.

- Discovery Farm tour for NRCS employees from Missouri and from the National Groundwater Center at Morrilton and the next day at Stuttgart. (Morrilton and Stuttgart, 28 attendees. June 22) (Daniels and Sharpley).
- Visiting Scientist Discovery Farm Tour. Jan. 2012 (Daniels). Nine scientists from Mississippi, Tennessee, Wisconsin, and Arkansas to review the Discovery Farm Program.
- Multi-State Discovery Farm Tour (Barber, Daniels, and Sharpley). Conducted on September 19 and 20, 2012 at the Cotton Discovery Farm in Kelso at the Steve Stevens farm and at the Rice- Soybean Discovery Farm on the Terry Dabbs farm in Stuttgart. 25 attendees including visiting scientists and Discovery Farm Stakeholders from North Dakota, Wisconsin, Minnesota, Missouri, Tennessee, Arkansas, and Louisiana.
- National Forage and Grassland Tour (Sharpley). April 2012. Poultry Discovery Farm on the Jeff Marley farm in Elkins Arkansas. April 18, 2012. 50 attendees.
- Arkansas Farm Bureau Commodity Committee Tour (Sharpley and Henry). Rice-Soybean Discovery Farm on the Terry Dabbs farm in Stuttgart. June 2012. 40 attendees.
- Discovery Farm in Stuttgart Tour for Regional NRCS personnel (Daniels). Upon request from Nancy Young, State Resource Conservationist with NRCS and a member of our Discovery Farm Technical committee, provided a tour for her and a member of her staff, Dianne Schlenker of NRCS, of our Discovery Farm at Stuttgart. August 21, 2012.
- Rice Expo Discovery Farm Tour (Daniels and Henry). Conducted for Rice Expo attendees at the Rice-Soybean Discovery Farm on the Terry Dabbs farm in Stuttgart. August 2012. 40 attendees.
- Cotton Discovery Farm (Sharpley, Daniels, and Robertson). Meeting included five Monsanto representatives including Dewayne Goldman. Dumas, Sept. 8, 2012. 8 attendees.
- Discovery Farm Stakeholder and Technical Committee meeting at our Discovery Farm in Morrilton (Sharpley and Daniels). Morrilton, Oct. 27, 2012. 50 attendees.
- NRCS Chief Jason Weller Tour of Arkansas (Sharpley and Daniels). Discovery Farm in Cherry Valley. Cherry Valley. August 28, 2013. 50 attendees.
- United Soybean Board Sustainability Committee Tour (Daniels and Henry). The USB Sustainability Committee conducted a three state sustainability tour in Arkansas, Mississippi and Tennessee for representatives from large food product companies that utilize soybean. Toured Discovery Farm in Cherry Valley on behalf of the USB. Sept. 25, 2014. 20 attendees.

- Gulf of Mexico Hypoxia Task Force Tour (Made up of 5 Federal Agencies and 13 States) (Daniels and Sharpley) Dabbs farm. Stuttgart area. May 20, 2016. 65 attendees.
- National Association State Conservation Administrators (Sharpley and Daniels). Dairy Discovery Farm (Bill and Delia Haak Dairy farm) and Savoy Poultry Farm. May 25, 2016. 40 attendees.
- Discovery Farm Tour at Morrow Farm for the Arkansas Association of Conservation Districts Executive Board (Daniels, VanDevender, and Sharpley). Oct. 24, 2016. 25 attendees.
- Conducted Conservation Tour for the NACD Executive Directors (Daniels) including at Dabbs Discovery Farm. Sept. 26-27, 2016.
- Conducted Discovery Farm / Water Resource Tour for visiting Faculty from Kentucky (Daniels and Robertson). Stuttgart. Oct. 6-8, 2016.
- Conducted Discovery Farm Tour for Cuban Delegation and WinRock International at Atkins Discovery Farm (Daniels). Oct. 25, 2016.
- Met with Agricultural Nutrient Policy Council Executive Board to discuss development of White Paper (Sharpley and Daniels) on agricultural nutrients and water quality, Bentonville. Nov. 1, 2016.
- Conducted Field Tour of our Discovery Farm in St. Francis County for NRCS State Conservationist NRCS Water Quality Specialists (Daniels) Craig Goodwin and Karma Anderson and Arkansas NRCS State Conservationist Mike Sullivan, NRCS State Engineer Walt Delp and State NRCS Specialist Alice Weeks. April 4, 2017.
- Conducted Field Tour of our Discovery Farm in Desha County for National NRCS Water Quality Specialists (Daniels) Craig Goodwin and Karma Anderson and Arkansas NRCS State Conservationist Mike Sullivan, NRCS State Engineer Walt Delp and State NRCS Specialist Alice Weeks. Stevens Farm near Rowher. April 6, 2017.
- Conducted Tour of Dabbs Discovery Farm near Stuttgart for the South Central Area of National Association of Conservation Districts (Daniels). March 22, 2017.
- Conducted Tour of Jefferson County Discovery Farms for Arkansas Land Management Corp for historically underserved farmers (Daniels and Robertson). July 19, 2017.
- Soil Health and Discovery Farm Tour for United Soybean Sustainability Tour for European Journalists and Farmer Bloggers. 8/28-8/29. Cherry Valley, Brinkley, Atkins, Elkins
- Discovery Farm Tour for Animal Discussion Groups, a conglomerate of multiple reps from industry, EPA, conservation, etc. 10/7 Elkins

- Discovery Farm Tour for NIFA Chief Scott Angle 6/19. Stuttgart
- Conducted Discovery Farm tour for Farm Bureau and EPA 4/24.
- Conducted Discovery Farm Tour for LEADAR 19 Class. Stuttgart. 7/11

LEGISLATIVE EVENTS

- Made presentation at the State Capitol during the General Assembly to House and Senate Ag. Committees (Daniels and Sharpley; State Capitol, 50 attendees, Feb. 2nd, 2009). Outcome: Discovery Farm Bill passed unanimously through both the House and Senate to approve the one- time funding of \$800,000 for the Division's Discovery Farm program from General Improvement Fund (GIF), however appropriations were not available. After the session was over, the Governor released \$120,000 of his discretionary portion of the Executive GIF.
- Water Resources Tour for joint House-Senate Ag. Committee of the State Legislature (Sharpley and Daniels). Discovery Farm (Marley Farm) at Elkins. (Northwest Arkansas, 90 attendees, June 28 and 29, 2011).
- Northeast Arkansas Water Resources Tour for the Joint Agriculture Committee of the State Legislature (Daniels, Sharpley, and Henry) July 2012. Rice-Soybean Discovery Farm on the Mike Wood farm.
- Discovery Farm and Drought Tour for Senator Pryor's Staff (Daniels). July 2012. Conducted for 2 staff members at the Rice-Soybean Discovery Farm on the Terry Dabbs farm in Stuttgart.
- Arkansas Congressional Staff Delegation Tour (Sharpley and Daniels) to plan and conduct a field tour at the Savoy Poultry Farm. Sept. 8, 2012. 20 attendees.
- U.S. Senator Boozman Discovery Farm Tour At the request of Senator Boozman gave a tour of our Discovery Farm in Atkins as part of his Statewide Ag. Tour. (Daniels and Sharpley). August 11, 2013. 25 attendees.
- Water Resource Tour for Arkansas Joint House-Senate Agri. Committee (Sharpley and Daniels) in Washington Benton Counties—Sept. 16 and 17, 2014; including speaking at the Arkansas Discovery Farm in Elkins (Marley Farm)
- US Representative Womack Visit to Discovery Farm at Jeff's Marley, Elkins---June 27, 2016 (Sharpley and Daniels).
- Daniels, M.B. 2014. Arkansas Discovery Farms: Row Crop Update. Presented at the UA-DOA Rice Expo to the Joint –Ag Committee for Agriculture. August 1. Stuttgart. 50 attendees.

- Daniels, M.B. 2015. Row Crop Discovery Farm Results. Presented at the Arkansas Soil and Water Board of Commissioners Meeting---Sept. 16, Fayetteville (State-Invited, 75 attendees).
- Conducted Tour of Stevens' Discovery Farm in Desha County for U.S. Representative Rick Crawford at his request. April 18, 2017 (Daniels and Robertson).
- Met with U.S. Senator John Boozman and staff at McGehee with Steve Stevens and others to discuss challenges facing Southeastern Arkansas and overview Discovery Farm efforts in the area. May 14, 2017 (Daniels).
- Assisted with tour of Big Creek Watershed Study (C&H Hog Farm) for Agency Heads and Governor's office
- Co-led with Debbie Moreland of AACD the Water Resource Tour for Arkansas Joint House-Senate Agri. Committee in Washington Benton Counties—September 16&17 including speaking at the Arkansas Discovery Farm in Elkins (Marley Farm)
- Arkansas Congressional Staff Delegation Tour Worked with other Division Faculty (Sharpley and Watkins) to plan and conduct a field tour at the Savoy Poultry Farm where I spoke on the Arkansas Discovery Farm (September 8, 20 people)
- Co-Chair with Debbie Moreland of the 2013 Water Resources Legislative Tour which was originally scheduled for Magnolia and Hope areas, but the Joint Agriculture Committee decided to include the Joint Energy Committee which requested to tour the El Dorado area to see first-hand the success story of diverting surface water from the Ouachita River for industrial and municipal to lessen dependence from the Sparta aquifer.

NATIONAL CONFERENCE AND SYMPOSIA ORGAINIZED

Conferences

Nutrient Management and Edge-of-Field Monitoring Conference: From the Great Lakes to the Gulf of Mexico. Downtown Memphis Sheraton. Memphis, TN. Dec. 1-3. Co-Chair of Planning Committee with Jim Gulliford, Executive Director of the Soil and Water Conservation Society. <u>http://www.swcs.org/documents/filelibrary/edge_of_field/Edge_of_Field_Final_Program</u> e_EEF27EEFBBFC0.pdf. Proceedings published as Special Issue of Soil and Water Conservation Journal, January 2018.

2007 Southern Region Water Quality Conference. Fayetteville Hilton. Fayetteville, AR. Overall Chair and Host.

Symposiums

Daniels, M.B (Chair), Dennis Frame, Ron Weiderholt, Warren Formo, Dennis Busch, **Brian Haggard and Andrew Sharpley**. 2012. Discovery Farms: Monitoring Runoff from Real, Working Farms and Empowering Farmers. Conducted on Thursday May 24, 2012, Workshop R5, at the USDA-NIFA 2012 National Land Grant and Sea Grant Water Conference. Portland OR. May 20 – 24. Abstract available at:

http://www.usawaterquality.org/conferences/2012/Workshops/workshop%20R5.pdf.

Daniels, M.B. (**Chair**) Mike Sullivan, Jennifer Heglund, Michele Reba, Charles Glover, Andrew Wargo and Dianne Schenkler. 2012. The Mississippi Healthy River Basin Initiative (MRBI): A Status Symposium. Conducted at the 67th International Annual Conference of the Soil and Water Conservation Society: Choosing Conservation: Considering Ecology, Economics and Ethics. Ft. Worth, TX. July 22-25, 2012. Abstract Available at:

http://www.swcs.org/documents/filelibrary/12ac/2012_Abstract_Book_7B7F4A470290D.pdf, page 32

Daniels, M.B (Chair), Dennis Frame, Ron Weiderholt, Warren Formo, **Andrew Sharpley**, and Robert Kroger. 2012. Discovery Farms: Monitoring runoff from real, working farms. Conducted at the 67th International Annual Conference of the Soil and Water Conservation Society: Choosing Conservation: Considering Ecology, Economics and Ethics. Ft. Worth, TX. July 22-25, 2012. Abstract Available at:

http://www.swcs.org/documents/filelibrary/12ac/2012_Abstract_Book_7B7F4A470290D.pdf, page 27.

Tomer, Mark, **M.B. Daniels**, (**Planning Committee**), Jim Anderson, and Gabrielle Ferguson. 2012. Advances and Challenges in Monitoring Water at the Field Edge: Methods and Case Studies. Conducted at the 67th International Annual Conference of the Soil and Water Conservation Society: Choosing Conservation: Considering Ecology, Economics and Ethics. Ft. Worth, TX. July 22-25, 2012. Abstract Available at:

http://www.swcs.org/documents/filelibrary/12ac/2012_Abstract_Book_7B7F4A470290D.pdf, page