

Curriculum Vitae

Jonathan Daniel Richwine

Contact Information

Email: jrichwine@astate.edu

Education

<u>Doctorate of Philosophy</u> Natural Resources	<u>University of Tennessee – Knoxville</u> Forestry, Wildlife, and Fisheries	<u>Aug, 2021</u> GPA: 4.00
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Dissertation: [Interseeding native warm-season grass pastures](#)

<u>Master of Science</u> Plant and Soil Sciences	<u>Mississippi State University</u> Forage and Alternative Crop Production	<u>May, 2016</u> GPA: 3.71
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Thesis: [Response of three cool-season grass species to nitrogen rate and harvest interval in north central Mississippi](#)

<u>Bachelor of Science</u> Agriculture	<u>University of Tennessee – Martin</u> Major: Agricultural Business Minor: Business Administration	<u>May, 2009</u> GPA: 3.57
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Professional Experience

Assistant Professor – Arkansas State University – Jonesboro, AR (Jan 2023 - Present)
Agricultural Studies, College of Agriculture (100% Teaching)

Precision Ag Data Analyst – Greenway Equipment, Inc. – Weiner, AR (Aug 2022 - Dec 2022)

Supervisor – Emily Clark Workman; Agronomy Service Manager

- Analyzed data for assigned customers for various row crops (rice, corn, etc.)
- Input data for assigned customers daily
- Examined harvested acres via software for inconsistencies and discrepancies
- Assisted with data processing setup

Graduate Research Assistant – University of Tennessee – Knoxville, TN (Aug 2016 - May 2021)

Supervisor and Academic Advisor – Dr. Patrick D. Keyser; Professor and Director,
Center for Native Grasslands Management

- Initiated and implement new field studies, data collection, and analysis
- Hired and manage field technicians
- Assisted in writing grants to gain funding for research
- Research focus includes: warm-season native forage crops and cool-season annual cover crops in Tennessee

Research Associate I – Mississippi State University – Mississippi State, MS (Jan 2016 - Jul 2016)

Supervisor and Academic Advisor – Dr. Brian S. Baldwin; Professor, Alternative Crops

- Assisted in selection breeding of native warm-season grasses for improved biomass production, seed quality, and seed germination
- Hired and managed undergraduate workers
- Managed field and laboratory operations
- Initiated and implemented new field studies, data collection, monitor and maintain inventory and equipment
- Research focus included: warm-season and cool-season native and exotic grasses and oilseeds as bioenergy and forage crops in Mississippi

Graduate Research Assistant – Mississippi State University – Mississippi State, MS (Aug 2013 - Dec 2015)

Supervisor and Academic Advisor – Dr. Brian S. Baldwin; Professor, Alternative Crops

- Assisted in selection breeding of native warm-season grasses for improved biomass production, seed quality, and seed germination
- Investigated basic agronomic management practices essential for newly developed species
- Research focus included: warm-season and cool-season native and exotic grasses as well as oilseeds as bioenergy and forage crops in Mississippi

Warehouse Assistant – Helena Chemical Co. – Sharon, TN (Apr 2012 - Jul 2012; Sept 2012 - Nov 2012; Seasonal)

- In charge of treating soybean and wheat seed with fungicide and insecticide
- Operated various equipment involved in daily activities (forklift, seed-treater, etc.)
- Loaded and unloaded deliver trucks
- Delivered supplies to farmers

Field Inspector – Tennessee Crop Improvement Association – Martin, TN (Aug 2011-Oct 2011; Aug 2012 - Oct 2012; Seasonal)

- Administered quality assurance inspections on soybean fields
- Worked to create positive moral with farmers
- Recorded data found and filled out reports with results

Teaching / Outreach Experience

Arkansas State University

-Instructor of Record – Online Courses

- AGRI 420V: Internships in Agriculture, Fall, Summer, and Spring Semesters
- AGRI 4223: Agriculture and the Environment, Spring Semester
- PSSC 1303: Introduction to Plant Science, Fall and Spring Semesters
- PSSC 2813: Soils, Fall and Spring Semesters
- PSSC 3803: Forage and Pasture Crops, Fall Semester
- PSSC 4853: Soil and Water Conservation, Spring Semester
- PSSC 489V: Crops Around the World, Fall Semester

-Invited Lecturer – In-Person Courses

- PSSC 1303: Introduction to Plant Science – Forages Lecture; Dr. Gill Giese – Fall 2023, Spring 2025
- AGRI 6391: Agriculture Seminar – Forb Grazing at UT; Drs. Steve Green and Ray Benson – Spring 2025
- AGRI 3103: Regenerative Agriculture Fundamentals – Forages Lecture and Pasture Walk; Drs. Steve Green and John Nowlin – Fall 2024

-Committees – University Level

- Undergraduate Graduation and Academic Credit Appeals Committee, Spring 2023 – Present

-Committees – College of Agriculture Level

- Strategic Planning Committee, Fall 2025 – Present
- Online Committee, Chair, Fall 2024 – Present
- Undergraduate and Graduate Assessment Committee, Fall 2024 – Present
- Undergraduate Curriculum and Policy Committee, Fall 2024 – Present
- Scholarships & Retention Committee, Fall 2023 – Present
- Undergraduate Graduation and Academic Credit Appeals Committee, Spring 2023 – Present
- Outreach Committee - Honors Banquet Sub-committee, Fall 2024
- Undergraduate and Graduate Affairs Committee, Fall 2023

University of Tennessee – Knoxville

-Teaching Assistant

- FWF 212: Dendrology and Silvics of North American Trees; Chris Graves – Spring 2020
- FWF 250: Conservation; Chris Graves – Spring 2020
- FWF 324: Wildlife Habitat Evaluation; Chris Graves – Fall 2019
- FWF 415: Upland Habitat Management; Chris Graves – Fall 2019
- FWF 315: Principles of Wildlife and Fisheries Management; Chris Graves – Spring 2019

-Invited Lecturer

- FWF 315: Principles of Wildlife and Fisheries Management; Chris Graves – Mar 2020
- FWF 250: Conservation; Dr. Amy Alford – Jun 2017

-Invited Reviewer

- WFS 461: Professional Development; Dr. Emma V. Willcox/Chris Graves – Apr 2018

Mississippi State University

-Teaching Assistant

- PSS 4103/6103: Forage and Pasture Crops; Dr. David J. Lang – Fall 2014

-Laboratory Instructor/Teaching Assistant

- PSS 1313: Introduction to Plant Science; Dr. Barry Stewart – Fall 2015

-Mentor/Facilitator

- SLCE 1002: Day One Leadership Community; Dr. Cade Smith – Fall 2015

-Invited Reviewer

- AIS 3333: Professional Presentations; Ms. Carley Calico – Nov 2014
- AIS 3333: Professional Presentations; Dr. Gaea Hock – Apr 2014

Peer-reviewed Publications

*denotes corresponding author

Bisangwa, E. *, **J.D. Richwine**, P.D. Keyser, A.J. Ashworth, D.M. Butler, U. Shrestha, and F.R. Walker. 2025. Native warm-season grasses show limited response to phosphorus and potassium. *Agronomy*. 15(3): 669.

<https://doi.org/10.3390/agronomy15030669>

Prigge, J.L. *, **J.D. Richwine**, E. Bisangwa, and P.D. Keyser. 2025. Interseeded Native Forbs Resilient Under Variable Grazing Regimen. *Land*. 14(5): 989.

<https://doi.org/10.3390/land14050989>

Bisangwa, E. *, **J.D. Richwine**, P.D. Keyser, A.J. Ashworth, and F.R. Walker. 2024. Native warm-season grass response to nitrogen fertilization. *Agronomy*. 14(1): 180.

<https://doi.org/10.3390/agronomy14010180>

Prigge, J.L. *, E. Bisangwa, **J.D. Richwine**, V.R. Sykes, J.L.Z. Ivey, and P.D. Keyser. 2024. Native forbs provide pollinator resources and improve forage nutrient composition, animal performance, and pasture productivity. *Agronomy*. 14(10): 2184.

<https://doi.org/10.3390/agronomy14102184>

Richwine, J.D.*, P.K. Keyser, J. Zobel, and F.R. Walker. 2024. Native forbs interseeded into native grass pastures persist under grazing. *Grass and Forage Science*. 79(2): 328-341.

<https://doi.org/10.1111/gfs.12651>

Prigge, J.L. *, E. Bisangwa, **J.D. Richwine**, K.J. Swilling, and P.D. Keyser. 2023. Blooming and forage characteristics of twelve native forbs subjected to repeated defoliation. *Agronomy*. 14(1): 28.

<https://doi.org/10.3390/agronomy14010028>

Hu, J., **J.D. Richwine**, P.D. Keyser, L. Li, F. Yao, S. Jagadamma, and J.M. DeBruyn*. 2022. Urea fertilization and grass species alter microbial nitrogen cycling capacity and activity in a C₄ native grassland. *PeerJ* 10:e13874. <https://doi.org/10.7717/peerj.13874>

Hu, J., **J.D. Richwine**, P.D. Keyser, L. Li, F. Yao, S. Jagadamma, and J.M. DeBruyn*. 2021. Ammonia-oxidizing bacterial communities are affected by nitrogen fertilization and grass species in native C₄ grassland soils. *PeerJ* 9:e12592.

<https://doi.org/10.7717/peerj.12592>

Hu, J., **J.D. Richwine**, P.D. Keyser, L. Li, F. Yao, S. Jagadamma, and J.M. DeBruyn*. 2021. Nitrogen fertilization and native C₄ grass species alter abundance, activity, and diversity of soil diazotrophic communities. *Frontiers in Microbiology*. 12:675-693.

<https://doi.org/10.3389/fmicb.2021.675693>

Richwine, J.D.*, P.D. Keyser, D.W. Hancock, and A.J. Ashworth. 2021. Using a browntop millet companion crop to aid native grass establishment. *Agronomy Journal*. 113:3210-3221. <https://doi.org/10.1002/agj2.20739>

Lee, D.K.*, E. Aberle, E.K. Anderson, W. Anderson, B.S. Baldwin, D. Baltensperger, M. Barrett, J. Blumenthal, S. Bonos, J. Bouton, D.I. Bransby, C. Brummer, P.S. Burks, C. Chen, C. Daly, J. Egenolf, R.L. Farris, J.H. Fike, R. Gaussoin, J.R. Gill, K. Gravois, M.D. Halbleib, A. Hale, W. Hanna, K. Harmony, E.A. Heaton, R.W. Heiniger, L. Hoffman, C.O. Hong, G. Kakani, R. Kallenbach, B. Macoon, J.C. Medley, A. Missaoui, R. Mitchell, K.J. Moore, J.I. Morrison, G.N. Odvody, R. Ogoshi, J.R. Parrish, L. Quinn, E. Richard, **J.D. Richwine**, W.L. Rooney, J.B. Rushing, R. Schnell, M. Sousek, S.A. Staggenborg, T. Tew, G. Uehara, D.R. Viands, T. Voigt, D. Williams, L. Williams, L.T. Wilson, A. Wycislo, Y. Yang, and V. Owens. 2017. Biomass production of herbaceous energy crops in the United States: Field trial results and yield potential maps from the multiyear regional feedstock partnership. *Global Change Biology Bioenergy*. 10:698-716. <https://doi.org/10.1111/gcbb.12493>

Popular and Trade Publications

Keyser, Patrick, and **Jonathan Richwine**. 2018. Native warm-season grasses' response to fertilizer amendments. *Progressive Forage Magazine*. Issue 8:19-21.

Extension Publications

Richwine, Jonathan, and Patrick Keyser. 2020. 2014-2018 Native warm-season grass variety trial. <http://nativegrasses.utk.edu/publications/2014-2018-Native-Warm-Season-Grass-Variety-Trial.pdf>

Professional Presentations

Oral Presentations

Prigge, J.L., P.D. Keyser, **J.D. Richwine**, E. Bisangwa, and K.J. Swilling. 2023. Diverse Pasture Performance, Persistence, and Management. Beef and Bees: Grazing High-Diversity Native Pastures Workshop. University of Tennessee Institute of Agriculture and Center for Native Grasslands Management, Knoxville, TN.

Bisangwa, E., **J. Richwine**, P. Keyser, and F. Walker. 2023. Effect of Nitrogen Fertilization on Native Warm-Season Grasses under Forage Management. Southern Branch, American Society of Agronomy. Oklahoma City, OK. Feb 4-6.

Bisangwa, E., P. Keyser, **J. Richwine**, and F. Walker. 2022. Switchgrass Stand Vigor under Repeated Harvests. 12th Eastern Native Grasslands Symposium. Louisville, KY. Oct. 3-6.

Brian S. Baldwin, Jesse I. Morrison, J. Brett Rushing, and **Jonathan D. Richwine**. 2019. Improvement of a Native Cool-Season Grass, Southeastern Wildrye (*Elymus glabriflorus*). Southern Pasture and Forage Crop Improvement Conference. Roanoke, VA. May 21-23. INVITED.

Richwine, J., P. Keyser, A. Ashworth, and G. Bates. 2018. Effect of N, P, and K Fertilization on Yield of Native Warm-Season Grasses. American Forage and Grassland Council Conference. Louisville, KY. Jan 14-17.

Baldwin, B.S., J.I. Morrison, **J.D. Richwine**, and J.B. Rushing. 2016. Breeding of native warm-season grasses to make them ag-friendly. American Forage and Grassland Council Conference. Baton Rouge, LA. Jan 10-13.

Richwine, J.D., J.I. Morrison, and B.S. Baldwin. 2015. Discerning Appropriate Agronomic Management Practices for Southeastern Wildrye in Northcentral Mississippi. 3rd Annual Future of Agriculture Graduate Student Competition. Mississippi State, MS. Feb 5.

Richwine, Jonathan D., Jesse I. Morrison, and Brian S. Baldwin. 2015. Nutritive Value of Cool-Season Grass Baleage as Affected by Nitrogen. Southern Branch, American Society of Agronomy. Atlanta, GA. Feb 1-3.

Baldwin, Brian S., Jesse I. Morrison, **Jonathan D. Richwine**, and J. Brett Rushing. 2015. Is Energy cane a Viable Bioenergy Crop in North-Central Mississippi? Southern Branch, American Society of Agronomy. Atlanta, GA. Feb 1-3.

Richwine, Jonathan D. 2015. Incorporation of a Native Cool-Season Grass into Forage Production Systems of Northcentral Mississippi. Emerging Scientist Competition. Proc. American Forage and Grassland Council Conference. St. Louis, MO. Jan 11-14.

Thornton, Matt, David Lang, **Johnny Richwine**, and David Russell. 2014. Long Term Persistence of Non-Toxic Endophyte Infected MAXQ Tall Fescue. Mississippi State University Cool-season Forage Field Day. Starkville, MS. Dec 5.

Richwine, Jonathan D. 2014. Integration of Southeastern Wildrye into a Grass Production System. Mississippi State University 3-Minute Thesis Graduate Student Competition. Starkville, MS. Nov 19.

Richwine, Jonathan D., Jesse I. Morrison, J. Brett Rushing, and Brian S. Baldwin. 2014. Effect of Nitrogen Application and Harvest Interval on Yield and Quality of Three Cool-Season Grass Species. Proc. 12th Annual MSU Graduate Student Research Symposium. Starkville, MS. Mar 22.

Richwine, Jonathan D. 2014. Effects of Nitrogen Application and Harvest Regime on Yield and Quality of Three Cool-Season Grass Species. Proc. 2nd Annual Future of Agriculture Graduate Student Competition. Mississippi State, MS. Feb 6.

Poster Presentations

Bisangwa, Eric, **Jonathan Richwine**, Patrick Keyser, and Forbes Walker. 2023. Native Warm-Season Grass Forage Yield and Nutritive Values as Affected by Nitrogen Fertilization. American Forage and Grassland Council Conference. Winston-Salem, NC. Jan 8-11.

Prigge, J.L., E. Bisangwa, **J.D. Richwine**, K.J. Swilling, and P.D. Keyser. 2023. Blooming and Forage Characteristics of Twelve Native Forbs and Legumes. American Forage and Grassland Council Conference. Winston-Salem, NC. Jan 8-11.

Richwine, Jonathan D., and Patrick D. Keyser. 2020. Grazing Native Warm-Season Forbs and Grasses in the Mid-South. American Forage and Grassland Council Conference. Greenville, SC. Jan 5-8.

Richwine, Jonathan D., P. Keyser, D. Hancock, and L. Marks. 2019. Using a Millet Nurse Crop for Native Grass Establishment. American Forage and Grassland Council Conference. St. Louis, MO. Jan 6-9.

Richwine, Jonathan D., and Patrick D. Keyser. 2018. Which Native Warm-season Grass Variety Would You Plant? American Forage and Grassland Council Conference. Louisville, KY. Jan 14-17.

Baldwin, B.S., J.I. Morrison, and **J.D. Richwine**. 2016. Assessment of Gamagrass Germplasm from across the Southeastern U.S. American Forage and Grassland Council Conference. Baton Rouge, LA. Jan 10-13.

Richwine, Jonathan D., Jesse I. Morrison, and Brian S. Baldwin. 2016. Factors Affecting Persistence of Southeastern Wildrye under Rigorous Harvest Regimes. American Forage and Grassland Council Conference. Baton Rouge, LA. Jan 10-13.

Richwine, Jonathan D., Jesse I. Morrison, and Brian S. Baldwin. 2015. Assessing Basic Agronomic Management Practices for Southeastern Wildrye [*Elymus glaberrimus* (Vasey ex L.H. Dewey) Scribn. & C.R. Ball]. 1st Annual Plant and Soil Science Graduate Student Competition. Starkville, MS. Nov 12.

Baldwin, Brian S., Jesse I. Morrison, **Jonathan D. Richwine**, and J. Brett Rushing. 2015. Is Breeding for Pest Resistance in Switchgrass a Viable Goal in North-Central Mississippi? Southern Branch, American Society of Agronomy. Atlanta, GA. Feb 1-3.

Richwine, Jonathan D., Jesse I. Morrison, Brian S. Baldwin. 2015. Baleage Evaluation of Three Grass Species across Nitrogen Fertility. American Forage and Grassland Council Conference. St. Louis, MO. Jan 11-14.

Morrison, J.I., **J.D. Richwine**, B.S. Baldwin. 2015. Preliminary Evaluation of Optimum Germination Conditions for Eastern Gamagrass [*Tripsacum dactyloides* (L.) L.] by Assessing Seed Moisture at Emergence. American Forage and Grassland Council Conference. St. Louis, MO. Jan 11-14.

Richwine, Jonathan D., Jesse I. Morrison, J. Brett Rushing, Brian S. Baldwin. 2014. Research in Action, Boots on the Ground, and Tax Dollars at Work. Mississippi Forage and Grassland Council Conference. Verona, MS. Nov 14.

Richwine, Jonathan D., Jesse I. Morrison, J. Brett Rushing, Brian S. Baldwin. 2014. Evaluation of Southeastern Wildrye, Tall Fescue, and Orchardgrass to N Fertilization and Cutting Frequency in North Central Mississippi. Proc. 68th Southern Pasture and Forage Crop Improvement Conference. Biloxi, MS. Apr 21-23.

Morrison, J.I., **J.D. Richwine**, B.S. Baldwin. 2014. Laboratory Seed Processing to Increase Purity and Improve Planting Ease in Southeastern Wildrye [*Elymus glaberrimus* (Vasey ex L.H. Dewey) Scribn & C.R. Ball]. Proc. 68th Southern Pasture and Forage Crop Improvement Conference. Biloxi, MS. Apr 21-23.

Grantsmanship

Funded

Keyser, P., A. Ashworth, K. Coffey, A. Griffith, S. Jagadamma, H. Nauman, P. Owens, L. Schneider, and **J. Richwine**. 2020. Back to the future: Improving productivity, sustainability, and resilience of Eastern grasslands. USDA-NIFA/AFRI, Agro-ecosystem Management. \$499,000.

O'Rourke, M., B. Tracy, G. Pent, M. Flessner, C. Larochelle, P. Keyser, A. Johnson, and **J. Richwine**. 2019. Bee-friendly beef: Integrating native wildflowers into Southeastern grazing systems. Natural Resources Conservation Services-Conservation Innovation Grant. \$882,922.

Not funded

Baldwin, B.S., J.I. Morrison, E.D. Billman, and **J.D. Richwine**. 2017. Screening to develop dicamba-tolerant alfalfa. National Alfalfa & Forage Alliance. \$44,217.

Professional Affiliations and Involvement

-Arkansas Forage and Grassland Council; Member, 2023 – present

-American Forage and Grassland Council; Member, 2014 – 2021; 2023 – present

- American Forage and Grassland Council Conference, 2015, 2016
 - Plant Identification Contest Committee
 - Judge for Plant Identification Contest

-Arkansas Grazinglands Coalition; Member, 2024

-Phi Kappa Phi Honor Society; Member, 2018 – 2022

-American Society of Agronomy; Member, 2014 – 2016; 2020 – 2022

-Crop Science Society of America; Member, 2014 – 2016; 2020 – 2022

-Soil Science Society of America; Member, 2014 – 2016; 2020 – 2022

-The Wildlife Society, National; Member, 2016 – 2022

-Tennessee Forage and Grassland Council; Member, 2016 – 2021

-Eastern Native Grass Alliance; Member, 2014 – 2021

- 10th Annual Longleaf Alliance and 9th Eastern Native Grass Symposium, 2014
 - Host University/Coordinating Committee
 - Meeting setup & logistics
 - Site Speaker at Splinter Hill Bog

-The Wildlife & Fisheries Society, Univ. of Tennessee – Knoxville Chapter

- Member, 2016 – 2020
- Wildlife Society Graduate Officer, 2018 – 2019

-Gamma Sigma Delta Agricultural Honor Society

- Univ. of Tennessee – Knoxville Chapter; Graduate Student Officer, 2019 – 2020
- Univ. of Tennessee – Knoxville Chapter; Member, 2016 – 2021
- Mississippi State Univ. Chapter; Member, 2015 – 2016

-Graduate Student Senate, Univ. of Tennessee – Knoxville

- Senate Chair, 2018 – 2019
- Senator for Forestry, Wildlife, and Fisheries, 2017 – 2019

-Plant & Soil Science Graduate Student Association, Mississippi State Univ.

- President, 2015 – 2016
- Departmental Representative for Mississippi State Univ. Graduate Student Association, 2014 – 2015

-Graduate Student Association, Mississippi State Univ.

- Graduate Ambassador, 2014 – 2015
- Representative for University Committee on Course & Curricula, 2014 – 2015

-Mississippi Forage and Grassland Council; Member, 2013 – 2016

- Mississippi Forage and Grassland Council Conference, 2014
 - Plant Identification Contest Committee
 - Judge for Plant Identification Contest

-NIMSS Multi-State Project NE 1010 (Breeding and Genetics of Forage Crops to Improve Productivity, Quality, and Industrial Uses); Member, 2013 – 2016

-NIMSS Multi-State Project S009 (Plant Genetic Resources Conservation and Utilization) (Miss. State Rep to this group); Member, 2013 – 2016

Professional Development

-Arkansas Soil and Water Conference and Expo, Jonesboro, AR – Jan 2023, 2024, 2025

-Arkansas Grazinglands Coalition Grazing Conference, Hope, AR – Mar 2024

-Arkansas Forage and Grassland Council Conference, AR – 2023, 2024

-University of Tennessee at Martin Forage Info Day, Martin, TN – Aug 2024

-Northeast Arkansas Cattleman's Association Meeting, Jonesboro, AR – Oct 2023

-Independence and Lawrence Counties Forage Field Day, Univ. of Arkansas Extension Service, Strawberry, AR – Mar 2023

-Eastern Native Grasslands Symposium 12th Meeting, Louisville, KY – Oct 2022

-American Forage and Grassland Council 2020 Annual Conference, Greenville, SC – Jan 2020

-Southern Pasture and Forage Crop Improvement Council 2019 Annual Conference, Roanoke, VA – May 2019

-American Forage and Grassland Council 2019 Annual Conference, St. Louis, MO – Jan 2019

- Eastern Native Grass Symposium 11th Biennial Meeting, Erie, PA – Sept 2018
- National Bobwhite Technical Committee Meeting, Albany, GA – Aug 2018
- American Forage and Grassland Council 2018 Annual Conference, Louisville, KY – Jan 2018
- Private Lands Management Workshop, Knoxville, TN – Jun 2017
- Southern Pasture and Forage Crop Improvement Council 2017 Annual Conference, Knoxville, TN – Jun 2017
- American Forage and Grassland Council 2017 Annual Conference, Roanoke, VA – Jan 2017
- The Wildlife Society's 2016 Annual Conference, Raleigh, NC – Oct 2016
- Eastern Native Grass Symposium 10th Biennial Meeting, Evansville, IN – Aug 2016
- American Forage and Grassland Council 2016 Annual Conference, Baton Rouge, LA – Jan 2016
- American Society of Agronomy Southern Branch Annual Meeting, Atlanta, GA – Feb 2015
- American Forage and Grassland Council 2015 Annual Conference, St. Louis, MO – Jan 2015
- 10th Annual Longleaf Alliance and 9th Eastern Native Grass Symposium Biennial Meeting, Mobile, AL – Oct 2014
- 68th Southern Pasture and Forage Crop Improvement Conference, Biloxi, MS – Apr 2014
- American Forage and Grassland Council 2014 Annual Conference, Memphis, TN – Jan 2014

Awards and Honors

Arkansas State University

- College of Agriculture Award of Excellence – Outstanding Team Award
 - Recipient, Fall 2024
- Faculty Excellence Award for Teaching – Non-Tenure Track
 - Nominated, Spring 2024

University of Tennessee – Knoxville

- Phi Kappa Phi Love of Learning Award
 - Recipient, Fall 2020
- Hazelwood Scholarship
 - Recipient, Fall 2020
- Herbert College of Agriculture Extraordinary Professional Promise citation
 - Recipient, Spring 2020
- Chancellor's Fellowship, College of Agricultural Sciences & Natural Resources, UTIA
 - Recipient, Fall 2016 – 2020
- Dr. Henry and Mrs. Claudia Fribourg Endowed Scholarship
 - Recipient, 2019 and 2018
- Rehabilitation Corporation of Tennessee Graduate Scholarship
 - Recipient, 2017

Mississippi State University

- Gamma Sigma Delta Agricultural Honor Society Scholarship, Mississippi State University Chapter
 - Recipient, 2015
- Masters Graduate Research Assistant of the Year, Mississippi State University
 - Recipient, 2015

- Emerging Scientist Competition, American Forage and Grassland Council Conference
 - 1st Place, 2015
- 3rd Annual Future of Agriculture, Master of Science Section Paper Competition
 - 2nd Place, 2015
- 2nd Annual Future of Agriculture, Master of Science Section Paper Competition
 - 3rd Place, 2014

University of Tennessee – Martin

- Magna Cum Laude, GPA: 3.57
- Paul and Martha Meek Leadership Award
 - Recipient, 2009
- Alpha Gamma Rho Brother of the Year Award
 - Recipient, 2009
- Who's Who Among Students in American Universities and Colleges
 - Recipient, 2008-2009
- UTM Mr. Greek Award
 - Recipient, 2008
- University Service Award
 - Recipient, 2007; 2008; 2009
- Hamilton-Ryker Scholarship
 - Recipient, 2005
- Phi Kappa Phi Recognition of High Scholastic Achievement
 - Recipient, 2005
- UTM Honor Roll
 - Recipient, 2004 – 2009 (all semesters)
- UTM Dean's List
 - Recipient, 2004 – 2009 (all semesters)
- Tennessee Lottery Scholarship
 - Recipient, 2004 – 2009
- Dean's Scholarship
 - Recipient, 2004 – 2008

Certifications

- Association of College and University Educator (ACUE) Effective Teaching Practices Certification – Fall 2024
- Collaborative Institutional Training Initiative (CITI) Program, 2024 (Expire in 2027)
 - Research Security Training Certificate
 - Social and Behavioral Responsible Conduct of Research Certificate
 - Human Research Group – Social/Behavioral Research Course Certificate
- Best Practices in Teaching – Univ. of TN, Knoxville – Graduate School – Spring 2020
- Best Practices in Publishing – Univ. of TN, Knoxville – Graduate School – Fall 2019
- University of Tennessee Institute of Agriculture's Master Beef Producer Program, Certificate of Completion, Cert. No. 04-99999-2019-27913, Apr 2019
- CIRTL Associate Level of Certification – Univ. of TN, Knoxville – Center for the Integration of Research, Teaching and Learning – Fall 2018

- Annual Fireline Safety Refresher Training, RT-130 – Work Capacity Test – Arduous, Jan 2018
- Wildland Fire Chainsaws, S-212, A Level Sawyer, Dec 2017
- Heartsaver® First Aid CPR AED certified, Dec 2017
- Responsible Conduct of Research Training for Non-Engineers, Collaborative Institutional Training Initiative (CITI Program), Jun 2017
- Conflicts of Interest Training, Collaborative Institutional Training Initiative (CITI Program), May 2017
- Basic Wildland Firefighter, S-130, S-190, S-134, L-180, I-100, IS-100, and IS-700 training, 2017
- Security Awareness Training, Oct 2016
- Certificate of Training, Mining Safety and Health Administration, U.S. Dept. of Labor, 2015 – 2017
- Burn Manager, Mississippi Forestry Commission, 2015
- Pesticide Applicator, Mississippi Bureau of Plant Industries, 2015
- UTV Operator, Mississippi Agricultural & Forestry Experiment Station, 2015
- Hunter Education Certificate, 2000

Volunteer Opportunities

- MEDIC Blood Donor, Knoxville, TN, 2019 – present
- Sevier Heights Baptist Church, Knoxville, TN
 - Sunday School Teacher for engaged and newly married couples, 2019 – present
 - Men's (age 20-30s) community group/devotional leader, 2018 – present
 - Certified TN Baptist Disaster Relief member, 2017 – present
 - Aided in disaster relief cleanup efforts following storms
 - Christmas at Sevier Heights Volunteer, 2018, 2019
 - Went on mission trip to Boston, MA, to aid church planters, 2017, 2018
 - Helped with committee projects at Thrive in the Lonsdale community of Knoxville during "Here for Knoxville" community outreach day, 2017
- Denver Zoo, 2015-2016
 - Provided weekly shipments of bamboo for the red pandas
- 13th Annual Graduate Student Association Awards Banquet, Starkville, MS, Apr 2015
 - Planning Committee Member
- 13th Annual MSU Graduate Student Research Symposium, Starkville, MS, Mar 2015
 - Facilitator
- Palmer Home, Columbus, MS, Dec 2014
 - Aided in Christmas decoration setup
- Halloween Carnival in the Junction, Starkville, MS, Oct 2014
 - Game moderator and tear-down
- PSS Graduate Student Association Disaster Relief Drive, Starkville, MS, May 2014
 - Collected perishable goods for victims of tornado damage in Louisville, MS
 - Delivered items to the specified collection location

Career Related Skills

- Completed UT-Knoxville Responsible Conduct of Research Lunch and Learn Series – Fall 2016
- Completed The Mississippi State University Graduate Teaching Assistant Orientation/Training
- Proficient in the use of Microsoft Office (primarily Microsoft Word, Powerpoint, and Excel)
- Skilled in statistical design and use of statistical analysis software (SAS)
- Skilled in field layout of experiments and data collection methods
- Well versed in operation of agronomic research tools and heavy equipment such as: GreenSeeker handheld NDVI meter, tractor, ALMACO planter, forage/grain plot harvester (Wintersteiger), skid steer (Bobcat), FOSS Near Infrared Reflectance Spectroscopy (NIRS)