

# ***Kevin S. Shaffer, Ph.D.***

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Extension Assistant Professor/Livestock Production Specialist  
West Virginia University Extension Service  
Division of Agriculture and Natural Resources  
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## **Education:**

**West Virginia University, Morgantown, WV** May 2012  
Ph. D. Animal and Food Science  
Dissertation: *Investigating potential sources of variation in residual feed intake in beef cattle*  
Advisor: E. E. D. Felton, Ph. D.

**West Virginia University, Morgantown, WV** May 2010  
M.S. Animal and Nutritional Science  
Thesis: *Residual feed intake, phenotype, and fertility in yearling beef heifers*  
Advisor: E. E. D. Felton, Ph. D.

**West Virginia University, Morgantown, WV** August 2007  
B.S. Animal and Veterinary Science  
Graduated *summa cum laude*  
GPA: 4.0

## **Professional Experience:**

**West Virginia University, Extension Assistant Professor** November 1, 2012-Present  
Division of Agriculture and Natural Resources  
Livestock Production Specialist (Appointment 70% Extension/30% College)

- Provide statewide leadership in the development, implementation and evaluation of teaching, research, and public service programs focused on livestock production and management—including best practices, behavior, well-being, animal-environmental interactions, and husbandry with major emphasis on the beef industry
- Develop and conduct relevant and applicable research projects
- Coordinate the West Virginia Young Sire Evaluation Program, West Virginia Feedlot and Product Information Program, and West Virginia Premium Heifer Program

- Utilize diverse teaching methods to deliver livestock related programming to youth and adults in traditional and non-traditional teaching settings

**West Virginia University, Extension Instructor**

April 18-October 31, 2012

Division of Agriculture and Natural Resources

Barbour County Extension Agent

- Developed and implemented programming for youth and adults related to livestock production and management, agronomy, and general agriculture
- Coordinate with state and local public and private organizations to enhance marketing and production opportunities for local livestock producers and farmers

*Responsibilities:*

- Supervision of program assistant and office staff
- Served as County Program Coordinator
- Documentation of programming efforts and impacts

**West Virginia University, Graduate Research Assistant**

Fall 2007-April 2012

Department of Animal and Nutritional Science

Advisor: Eugene Felton, Ph.D.

- Conceptualized and managed multiple livestock based research projects specializing in production efficiency
- Provider of and participant in Departmental and Extension sponsored service, educational, and professional development activities related to nutrition, feed efficiency, management, and selection of livestock

*Responsibilities:*

- Securing research funding
- Acquiring project materials—ordering, logistics, fabrication
- Financial management—operate within budget constraints
- Manage and coordinate research and facility staff
- Analyze data and prepare reports
- Detailed record keeping

**West Virginia University, Undergraduate Research Assistant**

Summer 2007

Supervisor: John Warren, Ph.D.

- Estrus detection and artificial insemination of research cow herd

## Teaching Experience:

### *Courses Taught:*

- Animal Production 341—Beef Production 2015 - 2018
- Animal Production 343—Beef Production Laboratory 2015 - 2018
- Animal and Veterinary Science 410—Calving Management 2013 - 2018
- Animal Physiology 430—Animal Breeding (Co-instructor) 2013
- Animal Production 339—Advanced Livestock Evaluation 2007

### *Guest Lectures:*

- Animal Production 341—Beef Production 2013
- Animal Nutrition 260—Introduction to Animal Nutrition 2010 - 2012
- Applied Nutrition 361—Ruminant Nutrition 2011
- Animal Nutrition 393—Ruminant Nutrition Laboratory 2011
- Animal Production 341—Beef Production 2009 - 2010
- Animal Production 343—Beef Production Laboratory 2009 - 2011
- Introduction to Animal Science Laboratory 2007 - 2008

### *Teaching Assistant:*

- Animal Nutrition 393—Ruminant Nutrition Laboratory 2010
- Animal and Veterinary Science 410—Calving Management 2007

### *Extension Teaching:*

#### 2018:

- *The WVQA Feeder Cattle Marketing Program—Does it pay?* 2018 Mountaineer Cattlemen’s College. November 30, 2018.
- *Bovine Nirvana—The Perfect Cow.* 2018 Mountaineer Cattlemen’s College. November 30, 2018.
- *Effect of Dewormer on Warm-Up Performance of Station Tested Beef Bulls.* 2018 Mountaineer Cattlemen’s College. November 30, 2018.
- *Effective Livestock Handling: Management of Facilities and Animal Handlers.* 2018 WV Women In Agriculture Conference. November 3, 2018.
- *Utilizing Dam Production Reports in Culling Decisions.* Producer consultation. Upshur County. October, 2018.
- *Utilizing Ultrasound Data in Replacement Heifer Selection.* Producer consultation. Upshur County. May, 2018

- *Genetic Progress through Effective Sire Selection.* WVU Extension Dinner Meeting Series, Greenbrier, Monroe, Pendleton and Pocahontas Counties. March 12, 13, 14, and 15, 2018.
- *Management Strategies for small-scale beef producers.* 14<sup>th</sup> Annual WV Small Farms Conference. Morgantown, WV. February 23, 2018.

### 2017 and Earlier:

- *Addressing Reproductive Issues in Beef and Sheep Operations.* WV Women In Agriculture Conference, Kingwood, WV. October 21, 2017.
- *Profit Oriented Selection in 2017 and Beyond—Defining Optimums.* Appalachian Grazing Conference, Morgantown, WV. March 10, 2017.
- *Master Beef Producer Program.* Greenbrier and Monroe Counties. March 9, 2017.
- *Genetic Progress through Effective Sire Selection.* WVU Extension Dinner Meeting Series, Berkeley/Jefferson, Grant/Hardy, Hampshire and Mineral Counties. January 9, 10, 11, and 12, 2017.
- *Evaluating soundness in beef bulls using a foot scoring system.* Wardensville Bull Evaluation Center, Wardensville, WV. March 9, 2016.
- *Profit Oriented Selection in 2016 and Beyond—Defining Optimums.* Virginia Cow Calf Conference, Weyers Cave, VA. February 25, 2016.
- *Heifer Development: Management Consideration and Cost Implications.* Gilmer Co. Producer Education Meeting, Glenville, WV. February 4, 2016.
- *Meeting Market Demands While Maintaining Efficient Cows.* 1<sup>st</sup> Annual Mountaineer Cattlemen’s College. Roanoke, WV. December 5, 2015.
- *Taking Advantage of Variation: Genetic Progress Through Effective Sire Selection.* Monroe County Cattlemen’s Association Annual Meeting. Union, WV. December 1, 2015.
- *Beef 101: Fact vs Fiction.* Harrison County Farm Bureau Annual Meeting. Clarksburg, WV. September 29, 2015.
- *Adding Value to Your Calf Crop.* Mason County Cattlemen’s Association Annual Meeting, Pt. Pleasant, WV. July 17, 2015.
- *Heifer Development: Management Consideration and Cost Implications.* Putnam Co. Producer Education Meeting, Winfield, WV. April 15, 2015.
- *Taking Advantage of Variation: Genetic Progress Through Effective Sire Selection.* Harrison Co. Producer Education Meeting, Grafton, WV. March 19, 2015.
- *Effective Livestock Handling: Management of Facilities and Animal Handlers.* Braxton Co. Producer Education Meeting, Flatwoods, WV. March 16, 2015.
- *Heifer Development: Management Consideration and Cost Implications.* WVU Extension Dinner Meeting Series, Ohio, Preston, Harrison, and Randolph Counties. March 9, 10, 11, and 12, 2015.
- *Beef Herd Management: Sire Selection.* 11<sup>th</sup> Annual WV Small Farms Conference. Charleston, WV. February 28, 2015.
- *Adding Value to Your Calf Crop—Taking Advantage of Cooperative Marketing.* 11<sup>th</sup> Annual WV Small Farms Conference. Charleston, WV. February 27, 2015.

- *Effective Livestock Handling: Management of Facilities and Animal Handlers.* Monongalia Co. Producer Education Meeting, Morgantown, WV. February 24, 2015.
- *Taking Advantage of Variation: Genetic Progress Through Effective Sire Selection.* Taylor Co. Producer Education Meeting, Grafton, WV. January 28, 2015.
- *Taking Advantage of Variation: Genetic Progress Through Effective Sire Selection.* Monongalia Co. Producer Education Meeting, Morgantown, WV. January 27, 2015.
- *Taking Advantage of Variation: Genetic Progress Through Effective Sire Selection.* Jackson Co. Producer Education Meeting, Cottageville, WV. January 15, 2015.
- *Effective Livestock Handling: Management of Facilities and Animal Handlers.* Gilmer Co. Producer Education Meeting, Glenville, WV. January 12, 2015.
- *Effective Livestock Handling: Management of Facilities and Animal Handlers.* Roane Co. Producer Education Meeting, Spencer, WV. December 18, 2014.
- *Market Outlook—Managing for the Future.* Upshur County Livestock Association 50<sup>th</sup> Annual Banquet, Buckhannon, WV. December 4, 2014.
- *Livestock Handling Facility Layouts and Management.* West Virginia Women in Agriculture Conference, Stonewall Jackson State Park. November 15, 2014.
- *Using Your Smartphone for Farm Record Keeping.* WVU Extension ANR Fall Program Unit Meeting, Jackson's Mill, WV. October 1, 2014.
- *Sire Selection.* Northern Panhandle Conservation District Field Day, Moundsville, WV. September 6, 2014.
- *A History of the WVU Hereford Herd.* West Virginia Polled Hereford Association Annual Field Day, Morgantown, WV. July 19, 2014.
- *Sire Selection.* Marion County Farm Bureau, Fairmont, WV. March 13, 2014.
- *Understanding and Evaluating Bull Test Data.* Webinar presented to Ag and Natural Resources county faculty. March 12, 2014.
- *Heifer Development: Management Consideration and Cost Implications.* WVU Extension Dinner Meeting Series, Mineral, Grant, Hampshire, and Berkeley Counties. February 10 and 11, 2014 and April 2 and 23, 2014
- *Youth Quality Assurance in West Virginia.* Agent and Ag Education Instructor Training Days. January 28-29, 2014.
- *Heifer Development: Management Consideration and Cost Implications.* WVU Extension Dinner Meeting Series, Ritchie, Jackson, Roane, and Wood Counties. January 27, 28, 29, and 30, 2014
- *Adding Value to Your Calf Crop.* Farm Opportunities Day Conference, Glenville, WV. January 25, 2014
- *Performance Evaluation Programs in West Virginia.* Fall Bull Test Preview, Wardensville, WV. October 20, 2013
- *Understanding Mineral Nutrition.* Braxton County Farm Bureau, Flatwoods, WV. March 12, 2013
- *Understanding EPD's.* Jones Run Farm Club, Lumberport, WV. February 7, 2013
- *Beef Calculator: Maximizing Profits.* Farm Opportunities Day Conference, Glenville, WV. January 2013
- Freeze branding for identification in beef cattle. June 2012

## **Publications:**

### *Refereed Articles:*

**Shaffer, K. S.** Effect of Pre-Test Environment and Management on Performance and Feed Efficiency of Station Tested Beef Bulls. In Preparation; Not Yet Submitted. Expected Date of Submission: October 2018.

**Shaffer, K. S.** A Novel Method for Determining Sale Eligibility of Station Tested Beef Bulls. Journal of Extension. In Review; Submitted December 3, 2018.

Wilson, M. E. D. C. Lay, S. A. Enneking and **K. S. Shaffer**. *Relationships between Residual Feed Intake and Other Biological Variables*. In Preparation; Not Yet Submitted. Expected Date of Submission: October 2018.

**Shaffer, K. S.**, P. S. Turk, W. R. Wagner, and E. E. D. Felton. 2011. *Residual feed intake, body composition, and fertility in yearling beef heifers*. J. Anim. Sci., 89:1028-1034.

### *Peer-Reviewed Extension Publications:*

**Shaffer, K. S.** *Maximizing the Value of Phenotypic Data in Genetic Evaluation*. WVU Extension Service Fact Sheet. In Review; Submitted November 26, 2018.

**Shaffer, K. S.** *Lingering Effects of Cold Stress*. WVU Extension Service Fact Sheet. Publication # ANR-ANSC-18-003. April 3, 2018.

**Shaffer, K. S.** *Managing Income for Long-term Success*. WVU Extension Service Fact Sheet. Publication # ANR-FM-18-001. April 3, 2018.

**Shaffer, K. S.** *Planning Ahead—A Five Step Process to Successful Sire Selection*. WVU Extension Service Fact Sheet. Publication # ANR-ANSC-18-001. March 28, 2018.

**Shaffer, K. S.** *EPD Basics*. WVU Extension Service Fact Sheet. Publication # ANR-ANSC-18-002. March 28, 2018.

### *Abstracts and Posters:*

D. A. Foglesong and **K. S. Shaffer**. 2018. Effect of grade and hide color on sale price of WV feeder cattle. Abstract submitted to 2019 American Society of Animal Science Midwest Section Annual Meeting. In Review.

Brackenrich, J., Basden, T.J., **K. S. Shaffer** and L.M. McDonald. 2016. Differences in Measured and Book Value Phosphorus Concentrations of Manure on Beef Cattle Operations in West

Virginia. The American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America Annual Meeting. Nov. 4-10, 2016, Phoenix, AZ. Presentation and abstract.

J. N. Kidrick, E. E. Felton, **K. S. Shaffer** and K. M Barnes. 2016. Relationship between Antioxidants and residual feed intake in grazing heifers. 2016 Animal Science Societies Joint Annual Meeting. July 19-23, 2016. Salt Lake City, UT. Poster and abstract.

Brackenrich, J., Basden, T.J., **K. S. Shaffer** and L.M. McDonald. 2015. Facilitating Development of Certified Nutrient Management Plans with Undergraduate Interns: A University – USDA Collaboration. 2015 Annual Meeting, American Society of Agronomy, Crop Science Society of America, Soil Science Society of America with the Entomological Society of America. “Synergy in Science: Partnering for Solutions” Nov. 15-18, 2015, Minneapolis, MN. Poster and abstract.

**Shaffer, K. S.**, P. S. Turk, W. R. Wagner, and E. E. D. Felton. 2010. *Residual feed intake, body composition, and fertility in yearling beef heifers*. Proceedings of the National Association of Animal Breeders 23<sup>rd</sup> Technical Conference on Artificial Insemination and Reproduction, p 100.

**Shaffer, K. S.**, W. R. Wagner, J. E. Warren, and E. E. D. Felton. 2009. *Residual Feed Intake, Phenotype, and Fertility in Yearling Beef Females*. J. Anim. Sci., 87 E-Suppl 3:117.

*Popular Press:*

**Shaffer, K. S.** *Early Fall Management Tips—Preparing the Cow Herd for Winter*. West Virginia Cattlemen. October, 2018.

**Shaffer, K. S.** *Plan Ahead to Maximize Profit*. West Virginia Cattlemen. August, 2018.

**Shaffer, K. S.** *Early Fall Management Tips—Preparing the Cow Herd for Winter*. West Virginia Small Farm Advocate. August, 2018.

**Shaffer, K. S.** *Plan Ahead to Maximize Profit*. West Virginia Farm Bureau News. August, 2018.

**Shaffer, K. S.** *Economics of Pregnancy Evaluation*. West Virginia Farm Bureau News. October, 2017.

**Shaffer, K. S.** and P. I. Osborne. *At the Meat Case—Selecting a Cut of Beef*. WVU Extension Service Online Publication. May 2017.

**Shaffer, K. S.** *Mid-south Angus Advisor*. Angus Journal Monthly Column. Angus Productions Inc. June 2016 – July 2017.

**Shaffer, K. S.** *Maternal or Terminal—Matching Selection Criteria with Purpose*. West Virginia Farm Bureau News. February, 2016.

**Shaffer, K. S.** *Increase Cow/Calf Net Returns through Value-Added Management.* West Virginia Farm Bureau News. July, 2015.

**Shaffer, K. S.** *Understanding EPDs and Genetic Variation—Why Things aren't Exact.* West Virginia Cattlemen. February, 2015.

**Shaffer, K. S.** *Why is feed efficiency important to you?* Mystic Hill Farms Sale Catalog. November, 2015.

**Shaffer, K. S.** *RFI and Feed Efficiency.* Mystic Hill Farms Sale Catalog. November, 2014.

**Shaffer, K. S.** *Make Wise Choices with Additional Income.* West Virginia Cattlemen. October, 2014.

Basden, T. and **K. S. Shaffer.** *Consider Agronomic Inputs with Additional Income from Livestock Sales.* West Virginia Farm Bureau News. October, 2014.

**Shaffer, K. S.** *RFI and Feed Efficiency.* Mystic Hills Farms Sale Catalog. November, 2013.

**Shaffer, K. S.** *Forage Testing a Necessity.* West Virginia Cattleman. August, 2013.

**Shaffer, K. S.** *Plan Ahead to Maximize Profit.* West Virginia Cattleman. June, 2013.

**Shaffer, K. S.** *Maternal or Terminal—Matching Selection Criteria with Purpose.* Wardensville Bull Test Catalog Cover Article. March 2013.

**Shaffer, K. S.** *The Purpose of a Bull.* West Virginia Cattleman. February, 2013.

**Shaffer, K. S.** *Is She Pregnant?* West Virginia Cattleman. December, 2012.

## **Professional Presentations:**

*The WVQA Feeder Cattle Marketing Program—Does it Pay?* 2018 Mountaineer Cattlemen's College. Roanoke, WV, November 30, 2018.

*Bovine Nirvana—The Perfect Cow.* 2018 Mountaineer Cattlemen's College. Roanoke, WV, November 30, 2018.

*Effect of Dewormer of Warm-Up Performance of Station Tested Beef Bulls.* 2018 Mountaineer Cattlemen's College. Roanoke, WV, November 30, 2018.

*Effective Livestock Handling: Management of Facilities and Animal Handlers.* 2018 WV Women In Agriculture Conference. Wheeling, WV, November 3, 2018.

*Management Strategies for Small-scale Beef Producers.* 14<sup>th</sup> Annual WV Small Farm Conference. Morgantown, WV, February 23, 2018.

*Addressing Reproductive Issues in Beef and Sheep Operations.* WV Women in Agriculture Conference. Kingwood, WV, October 21, 2017.

*Profit Oriented Selection in 2017 and Beyond—Defining Optimums.* Appalachian Grazing Conference. Morgantown, WV, March 10, 2017.

*West Virginia University and the Wardensville Bull Test.* GrowSafe Systems Collaborative Research Meeting, Denver, Co. November 18-19, 2016.

*Profit Oriented Selection in 2016 and Beyond—Defining Optimums.* Virginia Cow Calf Conference, Weyers Cave, VA. February 25, 2016.

*Meeting Market Demands While Maintaining Efficient Cows.* 1<sup>st</sup> Annual Mountaineer Cattlemen's College, Roanoke, West Virginia, December 5, 2015.

*Beef Herd Management: Sire Selection.* 11<sup>th</sup> Annual WV Small Farms Conference, Charleston, West Virginia, February 28, 2015.

*Adding Value to Your Calf Crop—Taking Advantage of Cooperative Marketing.* 11<sup>th</sup> Annual WV Small Farms Conference, Charleston, West Virginia, February 27, 2015.

*Livestock Handling Facilities Design and Management.* WV Women In Agriculture Conference. Roanoke, WV, November 15, 2014.

*Using Your Smartphone for Farm Record Keeping.* WVUES ANR Fall Program Unit Meeting, Jackson's Mill, West Virginia, October, 2, 2014.

*Beef Cattle 101.* 10<sup>th</sup> Annual WV Small Farm Conference. Charleston, WV, February 28, 2014.

*Adding Value to Your Calf Crop.* 2014 Farm Opportunities Day Conference. Glenville, WV, January 25, 2014.

*West Virginia Youth Quality Assurance Program.* WVUES ANR Fall Program Unit Meeting, Jackson's Mill, West Virginia, October, 3, 2013.

*West Virginia Premium Plus Heifer Program.* WVUES Livestock and Youth Agriculture Team Meeting, Jackson's Mill, West Virginia, March 12, 2013.

*Beef Calculator: Maximizing Profits.* 2013 Farm Opportunities Day Conference. Glenville, WV, January 24, 2013.

*Residual feed intake, body composition, and fertility in yearling beef heifers.* Davis College of Agriculture, Natural Resources, and Design Graduate Student Research Day, Morgantown, West Virginia, April 6, 2011.

*Residual feed intake, body composition, and fertility in yearling beef heifers.* Appalachian Grazing Conference, Morgantown, West Virginia, March 4-5, 2011.

*Residual feed intake, body composition, and fertility in yearling beef heifers.* National Association of Animal Breeders 23<sup>rd</sup> Technical Conference on Artificial Insemination and Reproduction, Milwaukee, Wisconsin, September 16-17, 2010.

*Residual feed intake, phenotype, and fertility in yearling beef females.* American Society of Animal Science 31<sup>st</sup> Midwestern Section Regional Meeting, Des Moines, Iowa, March 18-20, 2009.

## **Grants:**

### ***Received:***

1. *Prescribed Grazing Management Training Program and AFGC Professional Planning to Individual WV Livestock Farmers.* Funding Agency: USDA NRCS. Funding Amount: \$98,255. Project Period: May 2018 – May 2021. Co-Investigator.
2. *Forage systems efficiency and behavior analysis infrastructure development.* Funding Agency: USDA NRCS. Funding Amount: \$110,800. Project Period: Oct 2018 – June 2019. Co-Investigator.
3. *Prescribed Grazing Management Training and Outreach to Improve Livestock Production on Grasslands in WV.* Funding Agency: WV NRCS. Funding Amount: \$61,542. Project Period: Nov. 2017 – Sept 2020. Co-Investigator.
4. *Grazing Management.* Funding Agency: WV NRCS. Funding Amount: \$420,000. Project Period: Dec. 2016 - Dec 2019. Co-Investigator.
5. *Nutrient Management Plans Leading to CNMP Development In West Virginia.* Funding Agency: USDA NRCS. Funding Amount: \$665,711. Project Period: Sept. 2014 – Sept 2018. Co-Investigator.
6. *CNMP Development Using WVU Interns.* Funding Agency: USDA NRCS. Funding Amount: \$260,000. Project Period: Sept. 2014 – Sept 2016. Co-Investigator
7. *2016 West Virginia University Faculty Development Grant.* Funding Agency: West Virginia University Faculty Senate. Funding Amount: \$450. Funding Period: April 2016.
8. *Evaluation of Creep Feeding as a Cow/Calf Management Tool.* Funding Agency: Southern States Cooperative. Funding Amount: \$6,000. Project Period: July 2016 – Sept 2016. Principal Investigator.
9. *2014 West Virginia University Faculty Development Grant.* Funding Agency: West Virginia University Faculty Senate. Funding Amount: \$350. Funding Period: June 2014

10. *2013 West Virginia University Faculty Development Grant.* Funding Agency: West Virginia University Faculty Senate. Funding Amount: \$350. Funding Period: June 2013

**Submitted/Unfunded:**

1. *Improving Animal Feeding Efficiency and Water Quality Systems: A Sustainable Agricultural Model Farm.* Letter of Intent submitted to USDA—full proposal not encouraged. Collaborator.
2. *Evaluation of Dietary Effects on Feeding Behavior and Animal Performance in Finishing Beef Cattle.* Proposal submitted to Cooperative Research Farms—\$38,691.14. Co-Principal Investigator.
3. *Improving Within-Herd Genetic Evaluation Programs in Purebred Beef Cattle Populations.* Research and Scholarship proposal submitted to WVU Faculty Senate Grant Program—\$31,043. Principal Investigator.
4. *Evaluation of Dietary Effects on Feeding Behavior and Animal Performance in Finishing Beef Cattle.* Proposal submitted to Cooperative Research Farms—\$29,826.50. Co-Principal Investigator.
5. *Evaluation of Dietary Effects on Feeding Behavior and Animal Performance in Finishing Beef Cattle.* Proposal submitted to Cooperative Research Farms—\$44,937.86. Co-Principal Investigator.
6. *Improving vaccine efficacy in feeder calves through strategic deworming.* Research grant proposal submitted to Cooperative Research Farms--\$100,000. Co-Investigator.
7. *Improving vaccine efficacy in feeder calves through strategic deworming. Research grant proposal submitted to Merck Animal Health--\$100,000. Co-Investigator.*
8. *Development and Implementation of Reduced Risk Livestock Pest Management Programs to Promote Scarab Dung Beetle Populations.* Integrated research and education grant proposal submitted to USDA NIFA CARE program—\$149,824. Co-Investigator.
9. *Improving within-herd genetic evaluation programs in small to mid-sized purebred beef cattle populations.* Integrated research and extension education grant proposal submitted to USDA NIFA CARE program—\$146,071. Principal Investigator.
10. *Integrating livestock with crop production.* Research and education grant proposal submitted to Northeast SARE—\$150,178. Co-Investigator.
11. *Using Strategic Beef Cattle Dewormer Programs to Enhance Scarab Dung Beetle Populations on Pastures Resulting in Improved Manure Nutrient Cycling and Soil Health.* Conservation and Innovation Grant proposal submitted to USDA Natural Resources Conservation Service—\$480,844. Co-Investigator.
12. *Facilitation of dung beetle mediated ecosystem services through integrated cattle and pasture management in the Appalachian Uplands.* Research grant proposal submitted to USDA NIFA Foundational grant program--\$350,000. Co-Investigator.
13. *Improving within-herd Genetic Evaluation Programs in Purebred Beef Cattle Populations.* Research and education grant proposal submitted to Northeast SARE—\$232,213. Principle Investigator.

## **Gifts:**

1. *Forage systems efficiency and behavior analysis infrastructure development.* \$250,000 in kind gift of equipment by GrowSafe Systems, LTD. Airdrie, Alberta, Canada.
2. Sponsorship of 2<sup>nd</sup> Mountaineer Cattlemen's College—\$4,450
3. Sponsorship of 1<sup>st</sup> Annual Mountaineer Cattlemen's College—\$6,600
4. Sponsorship of 2016 WV Premium Heifer Program sale activities—\$500
5. Sponsorship of 2015 WV Premium Plus Heifer Program sale activities—\$1,000

## **Ongoing Research Projects:**

1. Effect of estrous synchronization with natural service on pregnancy response in yearling beef heifers. On-farm research project. Project Period: May 2018 – Present. Principal Investigator.
2. Effect of Pre-test Environment and Management on Performance and Feed Efficiency of Station Tested Beef Bulls. Unfunded project. Project Period: Nov. 2014 – Present. Principal Investigator.
3. Mating strategies and contemporary group management to maximize the utility and accuracy of within-herd genetic evaluation tools in purebred beef herds. Unfunded project. Project Period: May 2015 – Present. Principal Investigator.
4. West Virginia Young Sire Evaluation Program—Wardensville Bull Test, Southern Bull Test, and Southern Heifer Development program. Annual genetic evaluation programs with research reports published annually. Project Period: May 2013 – Present. Principal Investigator.

## **Selected Service Activities:**

1. WV Beef Expo Stockman's Contest live animal evaluation coordinator, 2013—Present.
2. Organized state 4-H livestock judging contest, 2015—present
3. State fair of West Virginia Livestock Superintendent, 2013—Present.
4. WVU Extension representative and program coordinator for WV State Livestock Roundup, 2015—Present.
5. WV Farm Bureau Editorial Planning Committee member, 2013—Present.
6. WVUES Beef Team co-chair, 2013—Present.
7. West Virginia Young Sire Evaluation Program Wardensville Bull Test Program Coordinator, 2013 - Present.
8. West Virginia Young Sire Evaluation Program Southern Bull Test and Heifer Development Program Coordinator, May 2015 - Present.
9. West Virginia Quality Assurance Feeder Cattle Marketing Program coordinator, 2013 - Present.
10. Division of Animal and Nutritional Science Beef Committee Chair, 2013—2016.
11. Division of Animal and Nutritional Science purebred beef cattle data collection and reporting supervisor, 2013—Present.

12. WVU Extension representative at WV State Livestock Marketing meeting.
13. West Virginia Beef Expo advisory committee member.
14. Consultant to county faculty and producers.
15. West Virginia representative to Beef Improvement Federation Annual Meeting.
16. Mountaineer Cattlemen's College planning committee chair. 2015—Present
17. Filled role of Livestock Marketing Specialist, March 1, 2013 – Present.
18. Filled role of Youth Ag Specialist, August 1, 2013 – Present.
19. West Virginia Premium Heifer Program coordinator and advisory committee chair, 2012 - 2015.
20. West Virginia Beef Cattle Short Course planning committee. Developed program and acquired speakers, 2013 - 2015.
21. Designed animal handling facility for local beef producer, March 2015.
22. Manuscript review. American Journal of Animal Science, December 2013.
23. Revised rules and recommended practices for 4-H youth livestock projects, October, 2013.
24. Organized West Virginia Feedlot and Product Information Program, August, 2013.
25. Developed rules and regulations for first fall-born bull evaluation at Wardensville Bull Test Center, May, 2013.
26. Presentation. *Preparing for careers in agriculture*. Philip Barbour High School Career Day, March 20, 2013.
27. Development of *Standards of Care* for beef cattle at West Virginia University.
28. Consultation with livestock producers, continuous.
29. Feed intake data analysis and RFI calculation, West Virginia Young Sire Evaluation Program, Wardensville Bull Test, February 20-22, 2012.
30. Presentation. *Nutritional management of the ewe flock*. West Virginia Small Ruminant Short Course, Morgantown, West Virginia, December, 10, 2011.
31. Presentation. *Nutritional management of the cow herd*. Jones Run Farm Club, Lumberport, West Virginia, November 3, 2011.
32. Manuscript review. American Journal of Animal Science, Fall 2011.
33. Feed intake data analysis and RFI calculation, West Virginia Small Ruminant Project Ram and Buck Test, 2010-2011.
34. Presentation. *Livestock Selection/Evaluation for Youth Projects*. West Virginia University Extension 4-H Leaders Training, Jackson's Mill, West Virginia, December, 2010.
35. State 4-H and FFA livestock evaluation contest official, 2008-2011.
36. Regional youth livestock and showmanship contest judge, 2007-2011.
37. Taught livestock evaluation course at Barbour County 4-H Camp, 2007.
38. 4-H volunteer camp counselor, Barbour County, West Virginia, 2005-2007.

### **Professional Memberships:**

- American Society of Animal Science
- National Cattlemen's Beef Association
- West Virginia Cattlemen's Association

- Beef Improvement Federation
- Gamma Sigma Delta