

# **K. Darrh Bullock**

Extension Professor

## **CV Summary**

### **Education:**

Ph.D. Degree - University of Georgia, June 1992

M.S. Degree - Auburn University, June 1988

B.S. Degree - Auburn University, December 1984

### **Work Experience:**

2004-Present Extension Professor, UK Animal and Food Sciences Department

1997-2004 Associate Extension Professor, UK Animal and Food Sciences Department

1992-1997 Assistant Extension Professor, UK Animal and Food Sciences Department

### **Productivity:**

Courses Taught - 2 (Intro to Animal Sciences 1998-2000; Beef Cattle Sciences 2010-21)

Refereed Journal Articles - 7

Reviewed Extension Publications - 38

Reviewed Whitepapers - 3

Other Extension Publications - 31

Educational Videos - 41

Educational Presentations (Reviewed slide sets) - 4

National Internet Educational Programs - 19

Internet Resources (not video or factsheets) – 5

Computer Spreadsheet Templates - 4

Satellite Programs - 5

Book Chapter Contributions - 5

Proceedings - 14

Abstracts - 36

Research Reports - 21

Workshop Proceedings - 2

Feature Articles in National/International Popular Press - 27

Popular Press Articles - 90

Websites - 2 ([www.nbcec.org](http://www.nbcec.org), [www.eBEEF.org](http://www.eBEEF.org))

Agent Training/Certification - 41

Producer Educational Activities – 900 (approximately)

Field Trials/Demonstrations - 5

Youth Activities - numerous

Grants: (\$7,138,822): PI (\$1,454,365); CO-PI (\$5,684,461)

Gifts (\$25,424)

### **Professional Recognitions:**

Awards - 11

National Grants/Projects Review Panels - 2

Regional/National/International Invited Presentations - 67

## **K. Darrh Bullock**

Extension Professor

### **Curriculum Vita**

#### **Education:**

Ph.D. Degree (Beef Cattle Breeding and Genetics)  
Major Professors: Dr. Larry Benyshek and Dr. Keith Bertrand  
University of Georgia, June 1992

M.S. Degree (Animal Breeding and Genetics)  
Major Professor: Dr. Daryl Kuhlert  
Auburn University, June 1988

B.S. Degree (Animal and Dairy Science)  
Auburn University, December 1984

#### **Background:**

Raised on our family farm, in Williston, FL, consisting of a large commercial cow-calf operation and commercial watermelon production. The farm currently consists of approximately 1200 commercial brood cows and I manage the genetics program.

#### **Work Experience:**

2004-Present Extension Professor, University of Kentucky Animal and Food Sciences  
Department  
1997-2004 Associate Extension Professor, University of Kentucky Animal and Food Sciences  
Department  
1992-1997 Assistant Extension Professor, University of Kentucky Animal and Food Sciences  
Department  
1990-1992 Departmental statistical consultant. University of Georgia  
1986-1992 Research and teaching assistant. University of Georgia  
1988-1989 Instructor of Growth and Evaluation of Livestock. University of Georgia  
1984-1986 Herdsman of Auburn University Lower Coastal Plain Research Station beef cattle  
breeding project. Auburn University  
1983-1984 Student employee at Auburn University Beef Teaching unit. Auburn University  
1981-1984 Owner-operator of a watermelon consulting and loading business (Summers). Self-  
Employed

#### **Courses Taught:**

ASC406 Beef Cattle Sciences – Fall, 2010 (7 students); Fall, 2011 (6 students); Fall, 2012 (12 students); Fall, 2012 (13 students); Fall, 2013 (13 students); Fall, 2014 (24 students);

K. Darrh Bullock

Fall, 2015 (25 students); Fall, 2016 (25 students); Fall, 2017 (17 students); Fall, 2018 (22 Students); Fall 2019 (25 Students); Fall 2020 (23 Students); Fall 2021 (10 Students).  
ASC106 Introduction to Animal Sciences Fall, 1998 (39 students); Fall, 1999 (42 students); Fall, 2000 (45 students).  
ASC120 Introduction to Animal Sciences Lab - Fall, 1998 (28 students), Fall, 1999 (23 students); Fall, 2000 (32 students).

**Team Taught:**

ASC106 Introduction to Animal Sciences Distance Learning Course; Breeding and Genetics Section - Satellite - Fall, 1998; Video- Fall, 1999-2005.

**Publications:**

Refereed Journal Articles

- Bullock, K. D.** and E. J. Pollak. 2009. Beef Symposium: The evolution of beef cattle genetic evaluation. *J. Anim. Sci.* 87: E1-2E.
- Bullock, K. D.**, F. A. Thrift, D. K. Aaron and J. K. Bertrand. 2000. Relationship between a bull's parental genetic merit differences and his progeny trait variability in Angus, Gelbvieh, and Limousin cattle. *J. Anim. Sci.* 78:2540.
- Fralix, K. D., D. J. Patterson, K. K. Schillo, R. E. Stewart and **K. D. Bullock**. 1996. Changes in morphology of corpora lutea, central luteal cavities and steroid secretion patterns of postpartum suckled beef cows after melengestrol acetate with or without prostaglandin F<sub>2a</sub>. *Theriogenology* 45:1255.
- Bullock, K. D.**, J. K. Bertrand, and L. L. Benyshek. 1993. Genetic and environmental parameters for mature weight and other growth measures in Polled Hereford cattle. *J. Anim. Sci.* 71:1737
- Azain, M. J., **K. D. Bullock**, T. R. Kasser and J. J. Veenhuizen. 1992. Relationship of mode of porcine somatotropin administration and dietary fat on the growth performance and carcass characteristics of finishing pigs. *J. Anim. Sci.* 70:3086.
- Bullock, K. D.**, J. K. Bertrand, L. L. Benyshek, S. E. Williams and D. G. Lust. 1991. Comparison of real-time ultrasound and other live measures as predictors of beef cow energy stores. *J. Anim. Sci.* 69:3908.
- Bullock, K. D.**, D. L. Kuhlert and S. B. Jungst. 1991. Effects of mass selection for increased weight at two ages on growth rate and carcass composition of Duroc-Landrace pigs. *J. Anim. Sci.* 69:1409.

Reviewed Whitepapers

- Bullock, K. D.**, A. Van Eenennaam, M. Spangler and R. Weaber. 2012. Delivering Genomics Technology to the Beef Industry.  
([www.nbcec.org/topics/WhitePaperGenomicsTechnology.pdf](http://www.nbcec.org/topics/WhitePaperGenomicsTechnology.pdf))
- Carstens, G., R. Hill, T. Welsh, M. Davis, J. Pollak and **K. D. Bullock**. 2007. National Beef Cattle Evaluation Consortium Position Paper on the Use of Insulin-like Growth Factor I (IGF-I) as an Indicator Trait in a Genetic Evaluation for Feed Efficiency.  
([http://www.nbcec.org/producers/feed\\_efficiency.html](http://www.nbcec.org/producers/feed_efficiency.html))

Hohenboken, W., T. Jenkins, J. Pollak, **D. Bullock**, and S. Radakovich. 2005. Genetic Improvement of Beef Cattle Adaptation in America.

([http://www.nbcec.org/producers/Beef\\_Cattle\\_Adaptation.pdf](http://www.nbcec.org/producers/Beef_Cattle_Adaptation.pdf))

*Reviewed Extension Publications*

**K. D. Bullock**, D. Moser. Beef Sire Selection Manual (Third Edition): The importance of Sire Selection. National distribution through National Beef Cattle Evaluation Consortium and ASC-169 (April 2021)

**K. D. Bullock**. Beef Sire Selection Manual (Third Edition): Assessing Management, Resources, and Marketing. National distribution through National Beef Cattle Evaluation Consortium and ASC-169 (April 2021)

**K. D. Bullock**. Beef Sire Selection Manual (Third Edition): Genetic Principles. National distribution through National Beef Cattle Evaluation Consortium and ASC-169 (April 2021)

**K. D. Bullock**. Kentucky Beef Book: Planning the Breeding Program. ID-108 (Major Revision 2021).

**K. D. Bullock**, K. Burdine. Kentucky Beef Book: Record Keeping for Management Decisions. ID-108 (Major Revision 2021).

Jeff Lehmkuhler, Katie VanValin, Kevin Laurent, **Darrh Bullock**, Les Anderson, Darrell Johnson. Alternative Protein Sources for Cattle. ID-263 (2020)

Jeff Lehmkuhler, Katherine VanValin, Les Anderson, **Darrh Bullock**, Kevin Laurent. Feeding Distillery Stillage to Beef Cattle. ASC-244 (2020)

Jeff Lehmkuhler, Les Anderson, and **Darrh Bullock**, Animal and Food Sciences; and Michelle Arnold. Weaning Beef Calves. ID-258 (2019)

**K. D. Bullock**. Simple Inheritance in Beef Cattle. eBeef.org – 2016-5 (January, 2017).

**K. D. Bullock**. The Genetics of Horned, Polled and Scurred Cattle. eBeef.org – 2015-4 (December, 2015).

**K. D. Bullock** and M. Rolf. Beef Sire Selection Recommendations. eBeef.org – 2014-1 (December, 2015). (Major revision of ASC-165)

A. Van Eenennaam and **K. D. Bullock**. Commercial Replacement Heifer Selection. eBeef.org – 2015-7 (December, 2015).

**K. D. Bullock**. Mating Systems in Commercial Beef Cattle Operations. eBeef.org – 2014-5 (November, 2014).

**K. D. Bullock**. Genetic Practices to Improve Beef Cattle Reproduction. eBeef.org – 2014-4 (November, 2014).

S. Bessin and **K. D. Bullock**. Expected Progeny Differences Trait Definitions and Utilizing Percentile Tables. ASC-211(January 2014). Mr. Bessin is a former student that I worked with to develop this factsheet while he was serving an internship in the Madison County Extension office.

**K. D. Bullock**. Using EPDs: Expected Progeny Differences. ASC-141 (Major Revision October 2010).

**K. D. Bullock**. Beef Sire Selection Manual (Second Edition): Assessing Management, Resources, and Marketing. National distribution through National Beef Cattle Evaluation Consortium and ASC-169 (May 2010)

- K. D. Bullock.** Beef Sire Selection Manual (Second Edition): Genetic Principles. National distribution through National Beef Cattle Evaluation Consortium and ASC-169 (May 2010)
- K. D. Bullock.** Fundamentals of Expected Progeny Differences. National Beef Cattle Evaluation Consortium Fact Sheet. (July, 2009).
- K. D. Bullock.** Curly Calf Syndrome. National Beef Cattle Evaluation Consortium Fact Sheet. (October, 2008).
- K. D. Bullock.** Kentucky Beef Book: Planning the Breeding Program. ID-108 (Major Revision 2005).
- W. B. Mikel, **K. D. Bullock**, and G. Anderson. Kentucky Beef Book: The End Product. ID-108 (Major Revision 2005).
- K. D. Bullock** and L. H. Anderson. Crossbreeding for the Commercial Beef Producer. ASC-168 (2004).
- K. D. Bullock**, L. H. Anderson, J. T. Johns and W. R. Burris. Beef Sire Selection Recommendations. ASC-165 (2003).
- L. H. Anderson, **K. D. Bullock**, W. R. Burris and J. T. Johns. Protocols for Synchronizing Estrus in Yearling Heifers. ASC-164 (2002).
- L. H. Anderson, **K. D. Bullock**, W. R. Burris and J. T. Johns. Strategies to Improve Reproductive Efficiency of Heifers. ASC-163 (2002).
- L. H. Anderson, W. R. Burris, J. T. Johns and **K. D. Bullock**. Managing Body Condition to Improve Reproductive Efficiency in Beef Cows. ASC-162 (2002).
- K. D. Bullock** and J. K. Bertrand. Selection and Management Practices to Increase Consistency in Beef Cattle. BIF Fact Sheet and ASC-159 (2000).
- L. H. Anderson and **K. D. Bullock**. Pelvic Measurements and Calving Difficulty. ASC-142 (Revised 2000).
- K. D. Bullock**, R. Burris, J. Henning, L. Anderson, B. Mikel, P. Scharko, and D. Shepherd. 1996-2010. Beef Integrated Resource Management Calendars. AGR-CAL
- D. Shepherd, R. Burris, J. Henning, P. Joerger and **D. Bullock**. Kentucky Beef Book. Section 1: The Kentucky Beef Industry. ID-108 (1997).
- K. D. Bullock.** Kentucky Beef Book. Section 5: Planning the Breeding Program. ID-108 (1997).
- K. D. Bullock** and B. Mikel. Kentucky Beef Book. Section 9: The End Product. ID-108 (1997)
- R. Coffey, **K. D. Bullock**, G. Parker, and K. Laurent. Boar Selection - Using Expected Progeny Differences (EPDs). ASC-153 (1997)
- K. D. Bullock** and K. M. Laurent. Basics of Keeping Production Records. ASC-150. (1996)
- D. J. Patterson, **K. D. Bullock**, J. T. Johns and W. R. Burris. Management considerations in beef heifer development: Breed type, weight and height, reproductive tract scores. ASC-144 (1995).
- D. J. Patterson and **K. D. Bullock**. Pelvic Measurements and Calving Difficulty. ASC-142 (1994).
- K. D. Bullock.** Using EPDs: Expected Progeny Differences. ASC-141 (1993).

Other Extension Publications:

CAIP Bull Cost-Share Changes. Off The Hoof (March 2021). **K. D. Bullock.**

- Reaching Out While Locked In: Beef Webinar Series. Off The Hoof (September, 2020). **K. D. Bullock.**
- Bull Qualifications for CAIP Beef Genetics Program. (March, 2020). **K. D. Bullock.**
- Bull EPD Qualification Calculator for CAIP Beef Genetics Program. Off The Hoof (January, 2020). **K. D. Bullock.**
- Udder Quality. Off The Hoof (April, 2019). **K. D. Bullock.**
- Bull Buying Tips. Off The Hoof (February, 2019). **K. D. Bullock.**
- BQCA Marketing. Off The Hoof (February, 2019). **K. D. Bullock.**
- Beef Cattle Genetics Webinar. Off The Hoof (January, 2018). **K. D. Bullock.**
- Beef Quality and Care Assurance. Off The Hoof (October, 2017). **K. D. Bullock.**
- Beef Improvement Federation Conference. Off The Hoof (February, 2017). **K. D. Bullock.**
- Pasture to Plate. Off The Hoof (April, 2015). **K. D. Bullock.**
- eBEEF Launched. Off The Hoof (September, 2015). **K. D. Bullock.**
- Several Major Breeds Combine for Joint Genetic Evaluation. Off The Hoof (February, 2015). **K. D. Bullock.**
- Horned, Polled, Scurred: What's the Big Deal? Off The Hoof (March, 2014). **K. D. Bullock.**
- Replacing Your Herd Bull. Off The Hoof (January, 2014). **K. D. Bullock.**
- Developmental Duplication in Angus. Off The Hoof (September, 2013). **K. D. Bullock.**
- 2013 Beef Sire EPD Requirements for CAIP Beef Genetic Improvement Program. AFS Website (February 2013). **K. D. Bullock.**
- Expected Progeny Differences - percentiles for several breeds. AFS Website (2000, 2001, 2002, 2003, 2004, 2005, 2006, 2013). **K. D. Bullock.**
- New CAIP Beef EPD Guidelines. Off The Hoof (February, 2013). **K. D. Bullock.**
- Recent debate in support of straightbreeding commercial cattle misguided and potentially dangerous to producers' bottom line. Off The Hoof (August, 2012). **K. D. Bullock.**
- Selection Trends: Are we headed in the right direction? Off The Hoof (June, 2012). **K. D. Bullock.**
- What is the Value of EPD Accuracies? Off The Hoof (April, 2012). **K. D. Bullock.**
- Beef Genetics Improvement Program – Updated EPDs. Off The Hoof (March, 2011). **K. D. Bullock.**
- Report from the NBCEC symposium on The Genetics of Reproduction. Off The Hoof (January, 2010). **K. D. Bullock.**
- Cattle Concentrations by State. AFS Website (2009). **K. D. Bullock**
- Implications of Curly Calf Syndrome to Beef Producers. Off The Hoof (October, 2008). **K. D. Bullock.**
- Breed Selection and Crossbreeding. Off The Hoof (February, 2007). **K. D. Bullock.**
- BSE Informational Sheet. 2004. **K. D. Bullock,** W. B. Mikel, J. T. Johns, L. A. Meyer, P. Scharko and J. Akers.
- Beef Sire Selection for Cattle Genetic Improvement Program. AFS Website (2006).
- Cattle Genetic Improvement Program Recommendations. AFS Website (2004).
- Kentucky FACTS rules and nomination forms. AFS Website (1999-2004).
- Kentucky Bull Evaluation rules and nomination forms. AFS Website (2000, 2003).
- University of Kentucky Guidelines for Bull Purchasing Programs. AFS Website (2001). **K. D. Bullock**

CHAPS Helpful Hints. AFS Website( 1995). **K. D. Bullock**, P. J. Joerger and K. M. Laurent.

Educational Videos

Milk: Benefit or Burden. UK Beef Webinar YouTube Video (2022). **K. D. Bullock** and J. W. Lehmkuhler.

Western Kentucky Tornado Disaster Relief. UK Beef Webinar YouTube Video (2021). **K. D. Bullock** (Host)

Timely Topics for Beef. UK Beef Webinar YouTube Video (2021). **K. D. Bullock** (Host)

Shooting the Bull: Answering Your Beef Related Questions. UK Beef Webinar YouTube Video (2021). **K. D. Bullock**, K. VanValin, L. Anderson, J. Lehmkuhler, K. Laurent.

Milk. Beef Minutes YouTube Video (2021). **K. D. Bullock** and J. W. Lehmkuhler.

Genetic Considerations to Reduce Calving Problems. UK Beef Webinar YouTube Video (2021). **K. D. Bullock**

Bull Buying While Social Distancing. UK Beef Webinar YouTube Video (2020). **K. D. Bullock**  
Past Bull Performance. Beef Minutes YouTube Video (2020). **K. D. Bullock**.

Genomics Testing Update. Beef Minutes YouTube Video (2020). **K. D. Bullock**.

EPDs in Bull Buying: CAIP Beef Genetic Improvement Program YouTube Video (2018). **K. D. Bullock**

Beef Quality and Care Assurance Overview. Module for BQCA Training (2017). **K. D. Bullock**, K. Laurent and B. Paul.

Genetics and Handling. Module for BQCA Training (2017). **K. D. Bullock** and R. Burris.

Proper Equipment and Additional Cattle Handling. Module for BQCA Training. (2017). R. Burris and **K. D. Bullock**

Simple Inheritance in Beef Cattle. YouTube Video (2017). **K. D. Bullock**

Beef Sire Selection Recommendations YouTube Video (2017). **K. D. Bullock**

Genetic Practices to Improve Beef Cattle Reproduction. YouTube Video (2017). **K. D. Bullock**

Mating Systems In Commercial Beef Cattle Operations. YouTube Video (2017). **K. D. Bullock**

The Genetics of Horned, Polled, Scurred. YouTube Video (2017). **K. D. Bullock**

What is the milk EPD? YouTube Video (2017). **K. D. Bullock**

How do I get improved accuracy? YouTube Video (2017). **K. D. Bullock**

How can I ensure I have polled calves? YouTube Video (2017). **K. D. Bullock**

Can I test for the polled allele? YouTube Video (2017). **K. D. Bullock**

Is it ok to breed a cow to a related bull? YouTube Video (2017). **K. D. Bullock**

What are the consequences of inbreeding? YouTube Video (2017). **K. D. Bullock**

Selection Basics. YouTube Video (2017). **K. D. Bullock**

What is maternal calving ease or calving ease maternal? YouTube Video (2015). **K. D. Bullock**

What is an EPD? YouTube Video (2015). **K. D. Bullock**

What is an economically relevant trait, or ERT? YouTube Video (2015). **K. D. Bullock**

Why is scrotal circumference important in yearling bulls? YouTube Video (2015). **K. D. Bullock**

Should commercial cattlemen select bulls with high scrotal circumference EPDs? YouTube Video (2015). **K. D. Bullock**

Which EPD is better for decreasing calving problems? YouTube Video (2015). **K. D. Bullock**

Cattle Handling and Care Certification. (2014) **K. D. Bullock**, K. Laurent, R. Burris, M. Arnold, J. Lehmkuhler, L. Anderson, P. Prater and B. Paul.

- Cattle Genomics and Ultrasound. YouTube Video (2012). **K. D. Bullock**
- Beef Cattle Genetic Improvement Model Program. DAS-0070 (2007). **K. D. Bullock.**
- Bovine Spongiform Encephalopathy (BSE) Informational Video. (2004). **K. D. Bullock,** W. B. Mikel, J. T. Johns, L. A. Meyer, P. Scharko and J. Akers.
- The Value of Beef Quality and Yield. VAS-1460 (2002). W. B. Mikel, **K. D. Bullock,** and J. T. Johns.
- Genetic Improvement of Beef and Dairy Herds (2001). **K. D. Bullock,** L. H. Anderson, and J. McAllister.
- Surviving the Drought of 1999: Options for Beef, Dairy and Horse Producers (1999). **K. D. Bullock,** J. T. Johns, L. A. Meyer, R. Coleman, D. Ditsch and D. Amaral-Phillips.
- Total Quality Management: Breeding Management. VAS-1026 (Revised, 1998). **K. D. Bullock,** L. H. Anderson and R. Greenwell.
- Management and Economics of Spring and Fall Calving (1997). **K. D. Bullock,** J. T. Johns, L. Meyer, L. Turner, S. Isaacs and D. Ditch.
- Total Quality Management Series: III. Breeding Management. VAS-1026 (1995). **K. D. Bullock,** D. J. Patterson and R. Greenwell.
- Using Expected Progeny Differences in Bull Selection. VAS-1021 (1994). **K. D. Bullock.**

#### Educational Presentations

- Utilizing Genetics and Handling Techniques for Improved Cattle Care. IACUC Training Module – 1.1.15 (January 2015)
- Genetic Defects in Beef Cattle. IACUC Training Module – 2.1.13 (November 2013)
- Beef Genetics –Fine Tuning Selection (2004). CD of materials presented in the internet educational programs below was made available to Kentucky ARN agents. This included PowerPoint slide sets and audio of the presenters.
- Beef Genetics –Molecular to Management (2002). CD of materials presented in the internet educational programs below was made available to Kentucky ARN agents. This included PowerPoint slide sets and audio of the presenters.
- Master Cattleman Program - Genetics. CDAS-006 (2002). Educational program developed for use in the Master Cattleman Program for use by Extension personnel to instruct producers in practices that will economically benefit their beef operation. This educational program incorporates basic genetics information along with audience participation opportunities.

#### National Internet Educational Programs

- Beef Genetics – Genetic Improvement to Support Beef Sustainability (2021). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers. Topics Opportunities for genetic improvement of beef system sustainability; Reducing environmental impact of beef production; Improving adaptation; and The future of selection for improved sustainability. Approximately eighty-five participants were involved on the live presentations with additional participants downloading the program later.
- Beef Genetics – Improving Selection Decisions (2020). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for



educating beef producers. Topics Decision Support Tools; Opportunities for Beef Bulls in Dairy Operations; Why Do Genetic Evaluations have to Change?; and The Value of Data. Approximately seventy-five participants were involved on the live presentations with additional participants downloading the program later.

Beef Genetics – Taking on the Tough Questions (2019). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers. Topics Reducing impacts of disease and parasitism; Improving cow productivity and longevity; The future of genome editing in food animal species; and Improving meat quality and BIF Guidelines. Approximately eighty participants were involved on the live presentations with additional participants downloading the program later.

Beef Genetics – Improving Selection Decisions (2018). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers. Topics Recent Changes to Genetic Evaluations; Novel Trait Development; Encouraging Data Collection and Correct Breed Utilization; and Decision Support Tools. Approximately seventy participants were involved on the live presentations with additional participants downloading the program later.

Beef Genetics – National Cattle Evaluation: Charting a Course for Continued Genetic Improvement (2017). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers. Topics Latest Advancements in National Genetic Evaluations: Conversion to Single Step; Implications of Beef Cattle Adaptability; New Type-Trait EPDs; and Cattlemen’s take on where National Cattle Evaluation should be going! Approximately seventy-five participants were involved on the live presentations with additional participants downloading the program later.

Beef Genetics – Evolution of Beef Cattle Genomic and National Cattle Evaluation Tools (2016). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers. Topics included Leveraging sequencing data: the role of functional variants in beef cattle selection, Genome editing: basics and impact on beef business, Evolution of multi-breed national cattle evaluation systems and Deployment of single step genomically enhanced national cattle evaluation systems. Approximately sixty-five participants were involved on the live presentations with additional participants downloading the program later.

Beef Genetics – Genomic Selection in Beef Cattle: Developments and Application (2015). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered topics including Advancements in National Cattle Evaluation Strategies, Beef Cattle Fertility Project and Sequencing Effort Update, New Beef Improvement Federation Guidelines, and Genomically Enhanced EPD Evaluations and New Genetics Educational Resources. Approximately sixty-five participants were involved on the live presentations with additional participants downloading the program later.

Beef Genetics – Genomic Selection in Beef Cattle: Developments and Application (2014). This was a national five session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered topics

including the latest technologies on incorporating genomics into genetic evaluations and updates on the three large genomics grants: BRD, Feed Efficiency and Reproduction. Co-coordinated and developed the program, and hosted two sessions. Approximately sixty-five participants were involved on the live presentations with additional participants downloading the program later.

Beef Genetics – Improving Efficiency through Genetics: Direct Selection and Navigating Antagonisms (2013). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered topics including matching genetics to environment, managing genetic antagonisms and selection indices. Co-coordinated and developed the program, and hosted one session. Approximately sixty participants were involved on the live presentations with additional participants downloading the program later.

Beef Genetics – Back to Basics or Cutting Edge - Why Not Both? (2012). This was a national five session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered a multitude of topics including crossbreeding, general selection and advanced genomics technology. Co-coordinated and developed the program, presented one educational segment and hosted one session. Approximately sixty participants were involved on the live presentations with additional participants downloading the program later.

Beef Genetics – Using Genomics in Beef Cattle Selection (2011). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered all aspects of genomics technology in beef cattle selection. Co-coordinated and developed the program, and hosted two sessions. Approximately fifty participants were involved on the live presentations with additional participants downloading the program later.

Beef Genetics – Selection Decisions: Technological Advancements (2010). This was a national five session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered results of many of the research trials conducted by the NBCEC. Co-coordinated and developed the program, and hosted two sessions. Approximately sixty participants were involved on the live presentations with additional participants downloading the program later. Funded through USDA-CREES Special Grant (PI).

Beef Genetics – Selection Decisions: The Good, the Bad and the Unknown (2009). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered the targeted selection using the latest technology and proven practices. Co-coordinated and developed the program, and hosted one session. Approximately seventy participants were involved on the live presentations with additional participants downloading the program later. Funded through USDA-CREES Special Grant (PI).

Beef Genetics – Putting DNA Technology to Work. (2008). This was a national five session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered all aspects of DNA technology. Co-coordinated and developed the program, and hosted two sessions. Approximately sixty-

- five participants were involved on the live presentations with additional participants downloading the program later. Funded through USDA-CREES Special Grant (PI).
- Beef Genetics – Reaching for Higher Fruit. (2007). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered some of the newer traits being considered for genetic evaluation including feed efficiency and disposition. Co- coordinated and developed the program. Approximately sixty-five participants were involved on the live presentations with additional participants downloading the program later. Funded through USDA-CREES Special Grant (PI)
- Beef Genetics – What’s Happening in Beef Cattle Genetics? (2006). This was a national four session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered the latest developments in selection including DNA technology. Co- coordinated and developed the program. Approximately sixty participants were involved on the live presentations with additional participants downloading the program later. Funded through USDA-CREES Special Grant (PI).
- Beef Genetics – Crossbreeding: Opportunities for the US Beef Industry (2005). This was a national seven session train-the-trainer program delivered to beef Extension specialists and others responsible for educating beef producers that covered all aspects of crossbreeding. Co- coordinated and developed the program and was the speaker for one session (Economic Impact of Crossbreeding). Approximately seventy-five participants were involved on the live presentations with additional participants downloading the program later. Funded through USDA-CREES Special Grant (PI).
- Beef Genetics – Fine Tuning Selection (2004). Follow-up to the Molecular to Management series. This was a national three session program delivered to beef Extension specialist and others responsible for educating beef producers that went into more depth on the use of molecular technologies and selection indices. Additional, there was a session on selecting beef cattle for adaptability to different environments. Kentucky ANR agents were invited to participate and several did.
- Beef Genetics – Molecular to Management (2002). This program was developed through the National Beef Cattle Evaluation Consortium educational program which I co-coordinate. My role in this program was as a major contributor to the conception, development and coordination. I also served as moderator for three of the sessions. This was a web-based educational program that gave beef specialists and other beef educators a better understanding of current beef breeding tools. This was a seven session program delivered by some of the top beef breeding experts in the nation via a live Internet hook-up. The program covered topics from understanding basic genetics to cutting edge molecular genetics application in beef genetics evaluation programs. Each participant received an educational CD of each session with audio, which they will be able to use in their educational programming. This CD was made available to all Kentucky ANR agents.

Internet Resources

- Beef Improvement Federation Guidelines for Uniform Beef Improvement Programs transition to an online wiki format. Chair of the BIF Guidelines Committee and serve on the Drafting Committee. Coordinated the transition of the Selection and Mating section ([http://guidelines.beefimprovement.org/index.php/Guidelines\\_for\\_Uniform\\_Beef\\_Improvement\\_Programs](http://guidelines.beefimprovement.org/index.php/Guidelines_for_Uniform_Beef_Improvement_Programs)).
- KY Bull Assessment Tool. Tool that allow bull buyers and sellers to enter information on their bulls to determine if they qualify for CAIP cost-share money (<https://afs.ca.uky.edu/beef/KBAT>). 2019-current.
- Member of the eBeef team that is coordinating the beef community of practice on eXtension ([www.ebeef.org](http://www.ebeef.org)). 2013-current.
- Manage the National Beef Cattle Evaluation Consortium website ([www.nbcec.org](http://www.nbcec.org)). 2009-current.
- Coordinated the webpage upgrade for the National Beef Cattle Evaluation Consortium ([www.nbcec.org](http://www.nbcec.org)). 2009.

Computer Spreadsheet Templates

- Crossbreeding Evaluation Worksheet (Improvement to previous worksheet incorporating economic impact of heterosis on longevity in beef cattle. (2005) Co-developed with Kenny Burdine in Agricultural Economics.
- Crossbreeding Evaluation Worksheet (2002). Co-developed with Steve Isaacs in Agriculture Economics.
- Bull Selection Tool (2001). J. D. Anderson, L. H. Anderson and **K. D. Bullock**.
- EPD Value Estimator (1996). Co-developed with Steve Isaacs in Agriculture Economics.

Satellite Programs

- Bull Purchase Program (2001).
- Surviving the Drought of 1999: Options for Beef, Dairy and Horse Producers (1999).
- Management and Economics of Spring and Fall Calving (1997).
- Strategies for Spring Breeding of the Beef Herd (1994).
- Cow Herd Management (1992).

TV

- Interviewed on National Cattlemen's Beef Association's Cattleman to Cattlemen broadcast on RFD-TV. (2017)
- Featured in National Cattlemen's Beef Association's Cattleman to Cattlemen broadcast on RFD-TV. Presented an educational piece on Beef Bull Selection. (2008)
- Featured on AgToday. Beef 101. (2007)

Radio

- Fifty-four radio presentations have been taped and distributed through the College of Agriculture, Communications Department and six interviews have been given at speaking engagements or invited.

E-mail

Information for county agents sent via E-mail. Timely messages sent to county agents informing them of current EPD information, DNA technology, genetic defects, CAIP information and UK Beef Webinar information.

Book Chapter Contributions

Guidelines for Uniform Beef Improvement Programs: Eighth Edition. 2002. Utilization. (pp. 67-92). Chapter Coordinator and Editor (Four authors contributed sections to this chapter).

Guidelines for Uniform Beef Improvement Programs: Seventh Edition. 1996. Seedstock Producers Guidelines. (pp. 63-73). Author.

Proceedings

**Bullock, K.D.**, M.L. Spangler, R.L. Weaber, T.N. Rowan, M.M. Rolf, J.E. Decker and A.L. Van Eenennaam. 2022. Conducting a National Beef Cattle Genetics Outreach Program in the USA. Twelfth World Congress on Genetics Applied to Livestock Production. In Review.

**Bullock, K. D.** 2018. Practical Guide for Using EPDs in Selection Decisions. Proceedings Applied Reproductive Strategies in Beef Cattle Symposium. Ruidoso, NM. August 29-30, 2018.

**Bullock, K. D.**, D. Brown and L. Keenan. 2017. The Power of Economic Selection Indices to Make Genetic Change in Profitability. Proceedings Beef Improvement Federation 49th Research Symposium and Annual Meeting. Athens, GA. May 31-June 3, 2017.

**Bullock, K. D.**, R. M. Lewis, R. L. Weaber, B. B. Lockee, D. R. Strohbehn, D. J. Garrick and E. J. Pollak. 2010. Distance Education: A Short-term Solution to Training Graduates and Producers by a Shrinking Population of Quantitative Geneticists. Ninth World Congress on Genetics Applied to Livestock Production, Leipzig, Germany. August 1-16, 2010. ISBN 978-3-00-031608-1(ID916).

**Bullock, K. D.**, D. R. Strohbehn, R. L. Weaber, E. J. Pollak, D. J. Garrick, J. K. Bertrand, D. W. Moser and J. M. Reecy. 2006. From Research to Application: A Model for Educating Beef Producers in Animal Breeding Technologies. Eighth World Congress on Genetics Applied to Livestock Production, Belo Horizonte, Brazil. August 13-18, 2006.

**Bullock, K. D.**, E. J. Pollak, J. K. Bertrand, D. Garrick, M. Enns, B. Weaber and D. E. Wilson. 2003. International Beef Cattle Genetic Evaluation in the United States and the Role of the National Beef Cattle Evaluation Consortium. Proceedings of the 2003 Interbull Meeting, pp 156.

**Bullock, K. D.** 1999. Crossbreeding: The Lost Art? Proceedings Beef Improvement Federation 31st Research Symposium and Annual Meeting.

**Bullock, K. D.**, and W. O. Herring. 1996. National steer feedout database: Potential problems and solutions (Southern states report). Proceedings Beef Improvement Federation 28th Research Symposium and Annual Meeting. pp 180.

Herring, W. O., **K. D. Bullock**, and D. Lalman. 1996. National steer feedout database: Present status and future possibilities. Proceedings BIF 28th Research Symposium and Annual Meeting. pp 177.

- Bullock, K. D.** 1995. Testing the application of across breed EPDs using dual registered Hereford and Polled Hereford bulls. Proceedings Beef Improvement Federation 27th Research Symposium and Annual Meeting. pp 201.
- Bullock, K. D.**, and D. J. Patterson. 1995. Pelvic growth in beef heifers and the effects of puberty. Proceedings Beef Improvement Federation 27th Research Symposium and Annual Meeting. pp 171.
- Bullock K. D.** 1995. BIF Guidelines Revisions: Guidelines for performance programs for seedstock producers and their organizations. Proceedings Beef Improvement Federation 27th Research Symposium and Annual Meeting. pp 164.
- Patterson, D. J., and **K. D. Bullock**. 1995. The Kentucky certified replacement heifer program. Proceedings Beef Improvement Federation 27th Research Symposium and Annual Meeting. pp 167.
- Patterson, D. J., and **K. D. Bullock**. 1995. Using prebreeding weight, reproductive tract score and pelvic area to evaluate prebreeding development of replacement beef heifers. Proceedings Beef Improvement Federation 27th Research Symposium and Annual Meeting. pp 174.
- Bullock, K. D.**, F. A. Thrift, D. K. Aaron and J. K. Bertrand. 1994. Correlation between differences in parental genetic merit and progeny variability in Angus cattle. Proceedings of the Fifth World Congress on Genetics Applied to Livestock Production. 17:192.

*Abstracts*

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- Bullock, K. D.**, K. R. VanValin, J. W. Lehmkuhler, L. H. Anderson, B. R. Crites, K. M. Laurent, M. L. Spangler and R. L. Weaber. 2020. Effectiveness of an Educational Program on Beef Bull Selection that Incorporates Classroom Instruction and a Mock Auction. J. Anim. Sci., Vol 98, E-Suppl. <https://doi.org/10.1093/jas/skaa278.133>.
- Bullock, K. D.**, J. Lehmkuhler, L. Anderson and M. Arnold. 2020. Exposing Undergraduate Students to Extension: Delivering Producer Education Presentations. J. Anim. Sci. Vol 98 E-Suppl. <https://doi.org/10.1093/jas/skaa278.342>.
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- Crites, B., E. Vanzant, **K. D. Bullock**, J. Lehmkuhler, R. Burris, L. Anderson. 2018. Implementation of an Integrated Farm Management Plan to Enhance Reproductive Performance in Beef Cow-Calf Operations. J. Anim. Sci. Vol 95 E-Suppl. <https://doi.org/10.1093/jas/sky404.423>.
- Crites, B. R., G. Conway, E. S. Vanzant, **K. D. Bullock**, J. W. Lehmkuhler, W. R. Burris, and L. Anderson. 2017. Relationships of Production Practices for Producers Participating in the UK Beef IRM Farm Program. J. Anim. Sci. Vol 95 E-Suppl.
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- UK Beef IRM Farm Program and USDA NAHMS Survey Data. *J. Anim. Sci.* Vol 95 E-Suppl.
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- Bullock, K. D.**, L.H. Anderson, W.R. Burris, J.C. Henning, P.B. Scharko, W.B. Mikel, D.W. Shepherd, J. Akers, J. Hunter and A. Smith. 2003. Using a value-added study tour and workshop to develop county-based Integrated Resource Management programs. *J. Anim. Sci.* Vol 81 Suppl 2
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- Patterson, D. J., N. M. Nieman, L. D. Nelson, C. F. Nelson, **K. D. Bullock**, K. K. Schillo, D. T. Brophy and B. L. Woods. 1994. Ovarian follicular dynamics and steroid secretion patterns after estrus synchronization with an oral progestogen prior to superovulation of postpartum beef cows. *J. Anim. Sci.* 72 Suppl. 1.
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- Bullock, K. D.**, J. K. Bertrand, L. L. Benyshek. 1993. Heritabilities and correlations for mature weight and other growth traits in Polled Hereford cattle. *J. Anim. Sci.* 71 Suppl. 1.
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- Bullock, D.**, A. Heenan and L. Van Rensburg. 2010. Summary of Kentucky Beef Cattle Performance Data Acquired Through the Integrated Resource Management Performance and Financial Records Program. 2010 Beef Research and Extension Report. SR-104.
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#### Workshop Proceedings

- K. D. Bullock** and Steve Isaacs. Genetic Management. Workshop for the Cow/Calf Managers (1995).
- K. D. Bullock**. Managing Cow size and Productivity. 1992 Kentucky Beef Cattle Roundup: Maintaining Profitability with Lower Cattle Prices (1992).

#### Feature Articles in National/International Popular Press

Featured or wrote over 30 articles that have been published in national trade magazines (US and Australia).

#### Popular Press Articles

Approximately 90 articles have been printed in the Kentucky Cattlemen's Association publication Cow Country News, Kentucky Farmer magazine and other media outlets.

#### News Releases

Provide news releases on timely topics through the Ag Communications service.

#### **Agent Training/Certification:**

- Precision Breeding. Veterinary Continuing Education Training. Fall 2021
- Skillathon Beef Breeding. Winter 2021
- Beef Quality and Care Assurance Training. Fall 2020
- Agent In-service: Beef Genomics and Indices. Spring 2020
- Beef Update: Bull Selection and the CAIP Beef Genetic Improvement Program. Spring 2019
- Beef Update: Options for Retained Ownership Training (Lync). Fall 2018
- Beef Quality and Care Assurance. Two Sessions In-service Training (Lync). Fall 2017
- Beef 101. Two Sessions In-Service for FCS Agents. Winter 2017.
- EPDs in Bull Buying. In-service Training (Lync). Spring 2016

New Agent Training on Beef Production Practices. Cattle Handling and Care and Bull Selection. Fall 2014.

Targeted Bull Selection In-service training (Lync). Spring 2014.

Cattle Handling and Care Certification In-service Training. Four locations and 70 ANR agents trained. Spring, 2014.

Basic Beef Agent Update for new agents on Understanding EPD's and Genomics, Summer 2013.

Basic Beef Agent Update for new agents on Understanding EPD's and Genomics, Spring 2011.

Beef Cattle Management Certification: Beef Genetics, Fall 2010.

Basic Beef Training for New Agents: Beef Cattle Genetics (internet training), Fall 2007

Beef 101 (2 Sessions for FCS Agents as part of Beef Consumer Focus In-Service), Spring 2007.

Agriculture and Natural Resources Agent In-Service Update: Opportunities in Advanced Master Cattleman and Applied Beef Production Practices, Fall 2006.

Agriculture and Natural Resources Agent In-Service Update: Changes in Beef Cattle Genetic Evaluation – Multi-breed Evaluations, Fall 2005.

Beef 101, Spring 2005.

Animal and Food Sciences Agent In-Service Training Workshop: Genetics and Sire Selection, Fall 200.

Master Cattleman Training, Spring 2003

Master Cattleman Training, Spring 2002

Bull Purchase Program, Winter 2002

Beef 101, Spring 2000

Beef Integrated Resource Management - Advanced Agent Training, Fall, 1999

Feeder to Plate - Beef Grading and Valuation, Fall 1997 through Summer 1998

Beef Integrated Resource Management - Advanced Agent Training, Fall, 1997

Determining Limiting Factors in Beef/Forage Operations training for new or non-animal science agents, September 12-13, 1996

Bull Evaluation II: Economic Considerations, January 18-19, 1996

CHAPS: Recording and interpretation training, January 4, 1996

Integrated Resource Management calendar training, December 1, 1995

Determining Limiting Factors in Beef/Forage Operations training for new or non-animal science agents, September 7-8 and 20-21, 1995

Bull Evaluation I: Selection and Maintenance training, January 23-25, 1995 (35 agents trained).

Total Quality Management Video Series training, October 11-12, 1994

Records Keeping and CHAPS III training, September 6-7 & 15-16, 1994

Trouble Shooting the Beef Operation training, August 30-31, 1994

Veterinarians Role in TQM, January 9, 1994.

Cattle/Forages Extension Group, Cow/Calf Workshop, July 26-27, 1993

Management Information Systems training, May 24-25, 1993

CHAPS Computer Software training. April 28-29, 1993

Cattle/Forages Extension Group, Backgrounding Workshop, February 23 & March 1, 1993

### **Producer Educational Activities:**

Approximately thirty-five presentations per year were made throughout Kentucky. These presentations included county, area and statewide field days. Presentations dealt with the most current means of making genetic progress within the beef industry primarily focusing on records keeping, crossbreeding and using Expected Progeny Differences.

### **Field Trials/Demonstrations:**

Beef Cattle Crossbreeding and Sire Selection (2007-Present). Several demonstrations across the state showing the importance of both crossbreeding and selection. These demonstrations incorporate many of the tools that are available to beef producers including: Expected Progeny Differences, selection indices and molecular technologies. Fitting genetics to management/environment is being stressed in these demonstrations. Currently one in Washington, Marion and Nelson counties.

Beef Cattle Crossbreeding and Records Demonstration (2004). Crossbreeding is a critical component of the economic viability of commercial beef producers. Because of the popularity of certain color patterns and breeds many producers have stopped utilizing crossbreeding in their breeding management programs. This demonstration starts with herds that have not utilized crossbreeding for at least five years. The herd is split into two groups with one group being bred to the same breed as before and the other group being crossbred. Full records will be collected in these herds to determine growth and reproductive differences.

Kentucky Beef FACTS program (1992-2002). This is a farm to slaughter program designed to give producers insight into the type of cattle they are producing. The program included over 3000 steers and over 130 producers. Several county groups have begun their own program and a number of producers have started retaining ownership on a larger scale. In a survey conducted in 1998 over 80% of past and current participants were satisfied with the program. Of the 20% that were dissatisfied, the largest reason why was because of how their cattle performed financially. (Coordinator)

CHAPS central processing pilot project (1997-98). One agent from each area was selected to recruit two producers in his county to have their cattle records recorded in the CHAPS computer software and performance reports returned. Twelve agents and 26 producers participated in the pilot project. Minimal success with the project, most producers lost interest in keeping records after the pilot was concluded. (Coordinator)

Beef Management Information Systems study (1993-95). Five field trials/demonstrations were recently completed concerning the productive and financial performance of the beef cattle operations, using an Integrated Resource Management approach. This project was funded by a \$90,000 grant. (Major contribution in multi-discipline group.)

### **Youth Activities:**

Coordinate scoring the National Collegiate, Junior Collegiate and 4-H Livestock judging contest at the North American International Livestock Exposition (1993-present).

Coordinate scoring of State 4-H Livestock judging contest (1993-present).

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Coordinate scoring the International Arabian Horse Association Judging Contest (1999-present).  
Coordinate educational activities at the District Heifer Shows (1992-2002).  
Heifer development project for youth that educates students on all aspects of heifer selection and management (1995-97).  
Coordinate beef genetics workshop for 4-H senior conference (1995).  
Assist with State Fair - steer and heifer shows, official for Beef Derby (These responsibilities have been transferred to county educators over my tenure at UK; initially having major responsibilities to currently serving in a supporting role).  
Official for Beef Expo educational contest (1994).  
Official for State Livestock judging contest (1992).

### **GRANTS FUNDED (\$7,138,822): PI (\$1,454,365); CO-PI (\$5,684,461)**

**Bullock K. D.**, L. H. Anderson, L. M. Arnold, K. H. Burdine, M. D. Hayes, J. J. Jackson, J. W. Lehmkuhler, S. R. Smith, C. Teutsch, K. R. VanValin. KY Governor's Office of Agricultural Policy (2020-22). Integrated CAIP for Beef Cattle Production. \$256,602 (PI)  
Anderson L. H., **K. D. Bullock**, R. D. Coffey, J. W. Lehmkuhler, C. H. Wood. KY Governor's Office of Agricultural Policy (2020-2021). i-Cow - A Cattle Management Tool for Today's Cattle Industry and an Electronic Portal for Education. \$200,000 (Co-PI)  
Lehmkuhler J. W., L. H. Anderson, **K. D. Bullock**, K. H. Burdine, H. Halich, C. Teutsch. Kentucky Beef Network (2019-2020). Integrated Resource Management Programs. \$467,603 (Co-PI)  
**Bullock, K. D.**, L. Anderson and J. Lehmkuhler. KY Beef Network (2018-19). Kentucky Bull Assessment Program. \$13,000 (PI)  
Lehmkuhler, J., D. Amaral-Phillips, **K. D. Bullock**, L. Anderson, S. Smith Jr., R. Burris and C. Teutsch. KY Beef Network (2017-19). Integrated Resource Management Programs. \$367,524. (Co-PI)  
Lehmkuhler, J., D. Amaral-Phillips, **K. D. Bullock**, L. Anderson, S. Smith Jr., R. Burris and C. Teutsch. KY Beef Network (2017-19). Applied Master Cattleman Program. \$36,250 (Co-PI)  
**Bullock, K. D.**, J. Lehmkuhler, W. R. Burris and L. H. Anderson. KY Beef Network (2017-18). Master Cattleman Program. \$38,000 (PI)  
**Bullock, K. D.** USDA-NIFA – Sub-award from Texas A&M (2014-17). Integrated Program for Reducing Bovine Respiratory Disease Complex In Beef and Dairy Cattle. \$101,176 (PI)  
**Bullock, K. D.**, J. Lehmkuhler, W. R. Burris and L. H. Anderson. KY Beef Network (2015-16). Pasture to Plate Program. \$194,378 (PI)  
**Bullock, K. D.**, J. Lehmkuhler L. H. Anderson, W. R. Burris. KY Beef Network (2015-16). Cattle Handling and Care Certification Program. \$20,100 (PI)  
Lehmkuhler, D. Amaral-Phillips, J., K. Burdine, **K. D. Bullock**, L. Anderson, S. Smith Jr. and G. Halich. KY Beef Network (2015-16). Master Education Series. \$232,158. (Co-PI)  
Lehmkuhler, **K. D. Bullock**, L. Anderson and R. Burris. KY Beef Network (2015-16). Applied Master Cattleman. \$43,500. (Co-PI)

- Burris, W.R., **K. Bullock**, L. Anderson, and J. Lehmkuhler. KY Beef Network (2015-16). Master Cattleman. Funded \$50,500.
- Bullock, K. D.**, J. Lehmkuhler L. H. Anderson, W. R. Burris. KY Beef Network (2013-14). Cattle Handling and Care Certification Program. \$49,100 (PI)
- Burris, W. R., **K. D. Bullock**, J. Lehmkuhler, L. H. Anderson. KY Beef Network (2013-14). Master Cattleman. \$29,600 (Co-PI)
- Lehmkuhler, J., D. Amaral-Phillips, S. Smith Jr., **K. D. Bullock**, G. Halich, K. Burdine, W. Burris, L. and Anderson. KY Beef Network (2013-14). Applied Master Cattleman. \$174,160. (Co-PI)
- Burris, W. R., L. H. Anderson, **K. D. Bullock**. KY Beef Network (2010-12). Master Cattleman. \$309,788 (Co-PI)
- Lehmkuhler, J., **K. D. Bullock**, L. H. Anderson, W. R. Burris. KY Beef Network (2010-12). Applied Master Cattleman. \$66,000. (Co-PI)
- Burris, W. R., L. H. Anderson, **K. D. Bullock**. KY Beef Network (2009-10). Master Cattleman. \$311,788 (Co-PI)
- Lehmkuhler, J., **K. D. Bullock**, L. H. Anderson, W. R. Burris. KY Beef Network (2009-10). Applied Master Cattleman. \$66,000. (Co-PI)
- Bullock, K. D.** USDA-Special Grant – Sub-award from Cornell University (2011). National Beef Cattle Evaluation Consortium educational program. \$45,000 (PI).
- Bullock, K. D.** USDA-Special Grant – Sub-award from Cornell University (2009). National Beef Cattle Evaluation Consortium educational program. \$50,000 (PI).
- Burris, W. R., L. H. Anderson, K. D. Bullock. KY Beef Network (2009-10). Master Cattleman. \$151,750 (Co-PI)
- Lehmkuhler, J., **K. D. Bullock**, L. H. Anderson, W. R. Burris. KY Beef Network (2009-10). Applied Master Cattleman. \$38,450. (Co-PI)
- Bullock, K. D.** USDA-Special Grant – Sub-award from Cornell University (2009). National Beef Cattle Evaluation Consortium educational program. \$47,500 (PI).
- Van Eenennaam, A., **K. D. Bullock**, D. Garrick, D. Drake, J. Pollak. USDA-NRI (2008). Integrating DNA information into Beef Cattle Production Systems. \$550,000 (Co-PI)
- Bullock, K. D.** USDA-Special Grant – Sub-award from Cornell University (2008). National Beef Cattle Evaluation Consortium educational program. \$50,000 (PI).
- Burris, W. R., L. H. Anderson, K. D. Bullock. KY Beef Network (2007-08). Master Cattleman. \$252,138 (Co-PI)
- Bullock, K. D.**, K. Burdine, L. H. Anderson. KY Beef Network (2007-08). Applied Master Cattleman. \$154,560. (PI)
- Anderson, L. H., **K. D. Bullock**, W. R. Burris. Ag Development Board (2007-08). Integrated Resource Management. \$215,500. (Co-PI)
- Bullock, K. D.** USDA-Special Grant – Sub-award from Cornell University (2006). National Beef Cattle Evaluation Consortium educational program. \$60,000 (PI).
- Bullock, K. D.**, L. H. Anderson, E. Wilkerson. KY Beef Network (2005-06). Applied Beef Production Practices. \$100,000. (PI)
- Anderson, L. H., **K. D. Bullock**, W. R. Burris. Ag Development Board (2005-06). Integrated Resource Management. \$200,500. (Co-PI)

- Bullock, K. D.**, K. Burdine, L. H. Anderson,. Ag Development Board (2005). Advanced Master Cattleman Program. \$208,000. (PI)
- Bullock, K. D.** USDA-Special Grant – Sub-award from Cornell University (2005). National Beef Cattle Evaluation Consortium educational program. \$50,000 (PI).
- Bullock, K. D.** USDA-Special Grant – Sub-award from Cornell University (2004). National Beef Cattle Evaluation Consortium educational program. \$30,000 (PI).
- Anderson, L. H., **K. D. Bullock**, W. R. Burris. Ag Development Board (2003). Integrated Resource Management. \$199,500. (Co-PI)
- Burris, W. R., **K. D. Bullock**, J. T. Johns, L. H. Anderson, L. A. Meyer, J. Henning, J. Bicudo, and P. Scharko. Kentucky Beef Network (2003). Educational grant to conduct Master Cattleman Program. \$233,080. (Co-PI)
- Bullock, K. D.** USDA-Special Grant – Sub-award from Cornell University (2003). National Beef Cattle Evaluation Consortium educational program. \$20,000 (PI)
- Vanzant, E. S., J. T. Johns, **K. D. Bullock**, K. K. Schillo, L. Turner, and R. Gates. Kentucky Science and Engineering Foundation (2002). Remote, continuous temperature detection in beef cattle. \$99,886. (Co-PI)
- Burris, W. R., **K. D. Bullock**, J. T. Johns, L. H. Anderson, L. A. Meyer, J. Henning, J. Bicudo, and P. Scharko. Kentucky Beef Network (2001). Educational grant to conduct Master Cattleman Program. \$249,000. (Co-PI)
- Bullock, K. D.**, and K. Johnson. Kentucky Department of Agriculture (2001). Value-added grant to promote Bull Evaluation Program. \$2500. (Co-PI)
- Burris, W. R., **K. D. Bullock**, L. H. Anderson, J. Henning, P. Scharko, J. Anderson, D. Shepherd and C. Absher. IFAFS-USDA (2000). Enhancing the Beef/Forage Potential of Small and Mid-Sized Beef Operations. \$750,000. (Co-PI)
- Bullock, K. D.**, P. Deaton and J. Stevenson. Kentucky Department of Agriculture (2000). Grant to promote FACTS program including the development of a color brochure. \$2500. (PI)
- Burris, W. R., **K. D. Bullock**, L. H. Anderson, J. Henning, P. Scharko, D. Shepherd and C. Absher. . Southern States (1999). Grant to fund IRM activities in exchange for developing management calendar for distribution in Southern States Cooperative stores. \$5,000. (Co-PI)
- Burris, W. R., **K. D. Bullock**, L. H. Anderson, J. Henning, P. Scharko, J. Anderson, D. Shepherd and C. Absher. Kentucky Cattlemen’s Association (1999). Integrated Resource Management value added workshop. \$4,000. (Co-PI)
- Bullock, K. D.**, W. B. Mikel, J. T. Johns, and W. R. Burris. Kentucky Beef Council (1997). Grant to conduct agent training entitled Feeder to Plate: Beef Grading and Valuation. \$10,000. (PI)
- Burris, W. R., L. H. Anderson, and **K. D. Bullock**. Cooperative Research Farm (1997). Supplementing beef cows before and during the breeding season. \$20,000. (Co-PI)
- Burris, W. R., **K. D. Bullock**, L. H. Anderson, J. Henning, P. Scharko, D. Shepherd and C. Absher. Kentucky Cattlemen’s Association (1997). Integrated Resource Management Advanced Agent Training Grant. \$1,950. (Co-PI)
- Johns, J. T., **K. D. Bullock**, and P. Scharko. Southern States and Alltech (1996). Effect of bioplex, bypass protein and energy on performance of first calf heifers. \$6,236. (Co-PI)

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- Burris, W. R., **K. D. Bullock**, J. Henning, P. Scharko, D. Shepherd and C. Absher. Kentucky Cattlemen's Association (1996). Funded Integrated Resource Management conference to initiate Phase II. \$500. (Co-PI)
- Johns, J. T., **K. D. Bullock**, D. J. Patterson, A. L. Meyer, J. Henning, P. Joerger and L. Turner. Kentucky Cattlemen's Association and cooperative producers (1994). Funds to support Beef Management Information System. \$90,000. (Co-PI)
- Meyer, L. A., J. T. Johns, **K. D. Bullock**, D. J. Patterson, J. Henning, P. Joerger and L. Turner. . Quality Assurance Partnership (1994). Funds to produce educational video series on Total Quality Management. \$27,500. (Co-PI)
- Group Strategic Alliances for Carroll County Feeder Calves.** Southern Region, Sustainable Agriculture Research and Education (SARE) (1994). Funds to explore alternative marketing strategies and breeding techniques to produce the type of cattle the industry desires. \$10,000. (Co-PI)
- Bullock, K. D.**, D. J. Patterson and K. K. Schillo. University Mini-grant for pelvic area study (1994). \$500. (PI)
- Bullock, K. D.**, J. T. Johns, David J. Patterson and R. Burris. Kentucky Cattlemen's Association (1992). Central Bull Test Performance Evaluation Program. \$7535. (Co-PI)

### **Gifts (\$25,424)**

- Beef Improvement Federation (2022). \$1,000
- Beef Improvement Federation (2021). \$1,000
- Kentucky Beef Improvement Association (2010). \$2,030
- Select Sires (2009). \$500
- Beef Improvement Federation (2007). \$1,244
- Beef Improvement Federation (2006). \$2,650
- Kentucky Cattlemen's Association (2000). \$500
- Kentucky Cattlemen's Association (1999). \$500
- Kentucky Cattlemen's Association (1996). \$500
- Kentucky Cattlemen's Association (1995). \$500
- Kentucky Cattlemen's Association (1994). \$500
- Kentucky Cattlemen's Association (1994). \$2,000
- American Angus Association, American Gelbvieh Association and the North American Limousin Foundation (1993). \$10,000

### **GRANTS NOT FUNDED (\$2,120,050): PI (\$1,075,924): Co-PI (\$1,044,126)**

- Scaglia, G., P. Beck, **D. Bullock**, S. Gadberry, J. Gillespie, J. Lehmkuhler, M. Looper, M. Poore, D. Poole, C. Rosenkrans, T. Smith, L. Stewart Jr. Adapting Genetic and Management Tools to Improve Heat Tolerance in Beef Cattle. USDA AFRI Climate Change. 2013-2018. Co-PI and Co-author. Requested \$996,069.
- Lehmkuhler, J. and **D. Bullock**. Bull Selection and Management to Reduce the Risk of Production and Financial Losses. Southern Risk Management Education Center. 2013. PI. \$48,057.



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- Bullock, K. D.**, and L. H. Anderson. Translational Genomics to Improve Fertility of Beef Cattle. USDA-NIFA (2012-2017). \$306,282 (PI)
- Bullock, K. D.**, and L. H. Anderson. National Program for Genetic Improvement of Fertility in Beef Cattle. USDA-NIFA (2012-2017). \$231,735 (PI)
- Bullock, K. D.**, J. Lehmkuhler, L. H. Anderson. USDA-AFRI. A Multifaceted Approach To Enhancing Nutrient Utilization In Beef Cattle. 2010-2015. \$1,022,400 (Rated Outstanding)
- Bullock, K. D.**, J. Lehmkuhler, L. H. Anderson. Comprehensive Beef Education. USDA Higher Education Challenge Grant. \$53,524 (PI)

## **Professional Recognitions:**

### Awards

- 2018 American Society of Animal Sciences Fellow Award
- 2017 American Society of Animal Sciences Animal Industry Service Award
- 2015 American Society of Animal Sciences Extension Award
- 2010 M. D. Whiteker Award of Excellence in Extension (University's highest Extension award)
- 2009 Continuing Service Award presented by the Beef Improvement Federation
- 2004 National Collegiate Livestock Judging Contest – Long-Time Service Award
- 2003 American Society of Animal Sciences Southern Section Extension Award
- 2002 Outstanding Project Award presented by the Association of Kentucky Extension Specialist for Integrated Resource Management Project (co-recipient)
- 1997 Educational Material Awards Program Certificate of Excellence presented by the American Society of Agronomy for the Beef IRM Calendar (co-recipient)
- 1996 Outstanding New Specialist Award presented by the Association of Kentucky Extension Specialist
- 1996 Outstanding Project Award presented by the Association of Kentucky Extension Specialist for the Total Quality Management video series (co-recipient)

### Grants/Projects Review Panels

- USDA-NRI 2008 Animal Genomics panel
- USDA-NIMSS 2008 Project Review panel

### Reviewer

- Ad Hoc Reviewer (1-2 reviews per year). Journal of Animal Science (2000-current): Applied Section, and Breeding and Genetics Section.
- USDA-ARS. J. C. Emenheiser, R. G. Tait, Jr., S. D. Shackelford, L.A. Kuehn, T. L. Wheeler, D. R. Notter and R. M. Lewis. Use of ultrasound scanning and BCS to evaluate composition traits in mature beef cows. 2014. Journal of Animal Science.
- USDA-ARS. S. D. Kachman, M. L. Spangler, G. L. Bennett, K. J. Hanford, L.A. Kuehn, E.J. Pollak, W.G. Snelling, R.M. Thallman, R. M. Saatchi and D. J. Garrick. Comparison of within and across breed trained molecular breeding values in seven breeds of beef cattle. 2012. Journal of Animal Science.
- USDA-ARS. E.J. Pollak, G.L. Bennett, W.G. Snelling, R.M. Thallman, L.A. Kuehn. Genomics and the global livestock industries. 2011. Special Edition of Animal Production Science.

- Ad Hoc Reviewer. Animal Genetics (2007-2008).
- National Beef Infobase. 1997-2001 Southern Region; Reviewed materials submitted from the southern region for inclusion in the National Beef Infobase CD-ROM and Website.
- USDA-ARS. L. D. Van Vleck, and L. V. Cundiff. Across-breed EPD tables for 2000 adjusted to a 1998 base. 2000. BIF Symposia Proceedings.
- USDA-ARS. Kristin L. Barkhouse, L. D. Van Vleck, and L. V. Cundiff. 1995. Mixed model methods to estimate breed comparisons for growth and maternal traits adjusted to a 1993 base. BIF Proceedings Manuscript.
- USDA-ARS. L. D. Van Vleck and L. V. Cundiff. 1995. Assignment of risk to across-breed EPDs with tables of variances estimates of breed differences. BIF Proceedings Manuscript.
- USDA-ARS. F. A. Rodr'iguez-Almeida, L. D. Van Vleck, and K. E. Gregory. 1996. Estimation of direct and maternal breed effects for prediction of EPD for birth and weaning weights in three multibreed populations. Journal of Animal Science Manuscript.

Invited Presentations

- National Cattlemen's Beef Association Winter Reboot. Getting the Most from Your Genetic Investment. Virtual. February 23, 2021
- American Red Poll Association Annual Meeting. Expected Progeny Differences (EPD): What's the Big Deal? Murray, KY. October 9, 2020
- American Shorthorn Association Board of Directors Meeting. The impact of crossbreeding. Virtual. July 14, 2020
- Piedmont Regional Beef Conference. Targeted Bull Selection. Pittsboro, NC. March 5, 2020
- National Cattlemen's Beef Association Cattlemen's College. Precision genetics and you don't need a GPS! San Antonio, TX. February 5, 2020
- South Africa Stud Book Elite Conference. The Uptake of Modern Technologies by Livestock Breeders in the USA. Parys, South Africa. September 19, 2019
- South African Stud Book Elite Conference. Interaction among research, graduate training and farmer extension. Parys, South Africa. September 18, 2019
- National Cattlemen's Beef Association Cattlemen's College. EPDs: Fact or Fiction. New Orleans, LA, United States. January 30, 2019
- Tennessee Cattlemen's Association Convention. Targeted Bull Selection. Murfreesboro, TN, January 25, 2019
- American Wagyu Association Convention. The value of a National Cattle Evaluation. Fort Worth, TX, October 5, 2018
- Applied Reproductive Strategies Conference. EPDs and how to use them. Ruidoso, NM, August 30, 2018
- Beef Improvement Federation. Who owns your data and where is it? (Panel Moderator). Loveland, CO, June 22, 2018
- National Cattlemen's Beef Association Webinar Series. Putting the tools to use. National Webinar Series, April 19, 2018
- National Cattlemen's Beef Association Webinar Series. Show me the money! Are there EPDs for profit? National Webinar Series, February 22, 2018

- Neogen Corporation. The Evolution of Selection in the Beef Industry: From Visual Assessment to Genomics and Beyond. Lexington, KY, September 27, 2017
- Beef Improvement Federation. The Power of Economic Selection Indices to Make Genetic Change in Profitability. Athens, GA, June 1, 2017
- Snyder Bull Sale Educational Program – Taking the Bull out of Genetics. EPD’s 101: A back to basics genetics lesson. Yerington, NV, March 11, 2017
- California/Nevada Cattlemen’s Association: Cattlemen’s College. Economics of Beef Cattle Breeding. Reno, NV, December 2, 2016
- California Extension. History of Beef Cattle Selection. Reno, NV, December 1, 2016
- USDA Meat Animal Research Center Symposium: DNA Technology: Where we’ve been, where we are, and where we’re headed. Utilizing genetic tools to meet your breeding objectives. October 2016. Clay Center, NE Oklahoma State University. Desirable Traits of an Extension Professional: An Animal Geneticist’s Perspective. Stillwater, OK, October 10, 2014
- South African Stud Book Elite 2016 Breeding Symposium. Using the Tools of the Trade in Mating Systems to Maximize Profit. Bloemfontein, South Africa, May 4, 2016
- University of Pretoria Beef Cattle Science Guest Lecturer. The History of Selection in Beef Cattle. Pretoria, South Africa, May 6, 2016
- West Virginia Cattlemen’s Convention. Utilizing Technology for Targeted Selection. Morgantown, WV, January 3-4, 2014
- American Gelbvieh Association. Making Genetic Progress, What Tools are Required? Louisville, KY, November 18, 2013
- Southern States Advanced Ruminant Feedmaster Program. Practical Genetic Selection Guidelines for the Beef Herd. Knoxville, TN, November 20, 2013
- National Wagyu Association Convention. Why is National Genetic Evaluation an Important Component of Wagyu’s Future? Stowe, VT, August 30, 2013
- California/Nevada Cattlemen’s Association: Cattlemen’s College. Fundamentals of Beef Cattle Breeding. Reno, NV, November 16, 2011
- Alabama-Mississippi Beef Cattle Genetics Learn at Lunch Series. Stocker Cattle Genetics. Via Internet. September 22, 2011
- Gamma Sigma Delta Distinguished Lecture Series. Desirable Traits of an Extension Professional: An Animal Geneticist’s Perspective. Lexington, KY, April 13, 2011
- National Cattlemen’s Beef Association, Cattlemen’s College. The Basics of Beef Cattle Breeding. Denver, CO, February 2, 2011
- Seventh Annual Cattlemen’s Workshop. Genetic Tools for Successful Cow/Calf Breeding Decisions. La Grande, OR, January 22, 2011
- Oregon Cattlemen’s Association, Cattlemen’s College. Selection Decision Toolbox. Bend, OR, December 2-3, 2010
- Ohio State University Beef Production School Managing Dynamic Change 2010. Systematic Crossbreeding and Heterosis. Hillsboro, OH, February 3, 2010; Athens, OH, February 4, 2010
- Southern States Beef Feedmaster Program. Using Records for Management Decisions and Enhancing Profits. Raleigh, NC, November 11, 2009

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- Meat Animal Research Center Educational Program. Behind the Scenes of EPDs. Clay Center, NE, June 22, 2009
- Northern California Cattlemen's Educational Program. Beef cattle production in the fescue belt. Yreka, CA, April 28, 2009
- Southern States Beef Feedmaster Advanced Program. Beef Genetic Basics. Raleigh, NC, January 8, 2008
- Southern States Beef Feedmaster Advanced Program. Beef Genetic Basics. Lexington, KY, December 4, 2007
- California/Nevada Cattlemen's Association: Cattlemen's College. Basic Sire Selection and Sire Selection Workshop. Reno, NV, November 7, 2007
- University of Missouri South Farm Field Day Symposium. Impact of Genetics on Adding Value to Beef Cattle. Columbia, MO, September 15, 2007
- University of Missouri Animal Science Departmental Seminar. National Beef Cattle Evaluation Consortium: Clearing the Water in the Beef Cattle Gene Pool. Columbia, MO, September 14, 2007
- Igenity RFI-I Symposium. IGF Test Survey Results. Atlanta, GA, January 25-26, 2007
- Beef Improvement Federation Annual Research Symposium and Meeting. Can We Build the Ideal Beef Animal? Fort Collins, CO, June 8, 2007
- Southern Plains Beef Symposium. Common Sense Approach to Beef Cattle Selection. Ardmore, OK, August 14, 2004
- Meat Animal Research Center Beef Genetics Training and Workshop. Developing and Implementing a Sire Selection Educational Exercise. Clay Center, NE, March 26-27, 2004
- Noble Foundation Beef Genetics Workshop. Incorporating Technology into Sire Selection. Ardmore, OK, March 4, 2004
- Mississippi Beef Cattle Improvement Association. Utilizing Genetics for Beef Improvement. Jackson, MS, February 6, 2004
- West Tennessee Cattlemen's College. Sire Selection Workshop. Dickson, TN, March 13, 2003
- INTERBULL. International Beef Cattle Genetic Evaluation in the United States and the Role of the National Beef Cattle Evaluation Consortium. Rome, Italy, August 28-30, 2003
- National Cattlemen's Beef Association Cattlemen's College. Genetics for Cowboys. Nashville, TN, January 29, 2003
- Southern Beef Day. Genetic Improvement and Assistance Programs for Kentucky Producers. Somerset, KY, October 5, 2001
- Beef Improvement Federation Annual Conference. Crossbreeding: The Lost Art? Roanoke, VA, June 16-19, 1999
- Retaining Ownership of Cattle. K. D. Bullock. Kentucky Farm Bureau 1999 Young Farmer Leadership Conference. January, 1999
- Interpreting Feedlot and Carcass Data. K. D. Bullock and W. B. Mikel. Kentucky Cattlemen's Association Convention. January, 1999
- Targeted Breeding. K. D. Bullock. Kentucky Farm Bureau 80th Annual Convention. June, 1998
- Southern Region of Agriculture Economists. Standardizing State Feedlot and Carcass Programs. Little Rock, AR, February 1998
- HAT Ranch Tour. Optimizing Today to Ensure Tomorrow. Coon Rapids, Iowa, August 9, 1996

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- Beef Improvement Federation Annual Conference. A Summary of Steer Feedout Program Data. Birmingham, AL, May 15-18, 1996
- The South Florida Beef/Forage Program. Sire Selection Considerations in a Heifer Development Program. Arcadia, FL, November 10-11, 1995
- Beef Improvement Federation Annual Conference. Kentucky's Heifer Development Programs. Sheridan, WY, May 31 - June 3, 1995
- Beef Improvement Federation Annual Conference. Problems With Across Breed EPDs. Sheridan, WY, May 31 - June 3, 1995
- American Tarentaise Association board of director's midyear meeting. Concerns About Across Breed Genetic Comparisons. April 1995
- Junior National Polled Hereford Educational Program. Genetics of Ultrasound and Carcass Traits. Louisville, KY. February 1995
- University of New England, Animal Breeding and Genetics Unit. Relationships between Puberty and Pelvic Area. Armidale, NSW, Australia, September 27, 1994
- Southern Experiment Station Statisticians Meeting. National Cattle Evaluation and Trait Variability. Lexington, KY, August 4, 1994
- Kentucky Cattlemen's Association Annual Convention. Expected Progeny Differences and Changes in the Kentucky Bull Sales Procedures. Lexington, KY, January 8, 1994
- Tennessee Cattlemen's Association Annual Convention. Problems Associated with Across-Breed EPDs. Nashville, TN, November 20, 1993

### **Professional Improvement:**

Attend American Society of Animal Sciences (National and Southern Section) annual meetings and the Beef Improvement Federation Convention and Research Symposium on a regular basis. Attend World Congress on Genetics Applied to Livestock Production, held quadrennial (2018, 2014, 2010, 2006, 2002 and 1994).

### **Committees and Professional Activities:**

#### International

United States' representative to the International Committee for Animal Recording Beef Working Group (2000-2010)

#### National/Regional

- eBeef.org, Co-organizer and Team Member: Web resource for beef cattle management through eXtension (2014-present)
- National Beef Cattle Evaluation Consortium, Board of Director and Coordinator of Educational Programs (2001-present)
- Beef Improvement Federation, Member Board of Directors Chair Producer Application Committee and East Region Secretary (2015-present)
- Beef Improvement Federation, Member Board of Directors, Chair Multi-trait Selection Committee and Eastern Region Secretary (2001-2008)
- Southern Section, American Society of Animal Science, Extension Award Committee Chair (2000, 2007)

Southern Region Extension Beef Group. Co-chair (1996-2004)  
National Beef Cattle Evaluation Consortium, Advisory Council Chair (2001-2004)  
Five State Beef Initiative, Member Genetics Action Team (2000-2004)  
National Beef Cattle Evaluation Consortium, Advisory Council Vice-chair (2000-2001)  
Southern Section, American Society of Animal Science, Extension Committee Chair (1999)  
Southern Section, American Society of Animal Science, Extension Committee Vice-Chair (1998)  
Southern Section, American Society of Animal Science, Extension Committee Secretary (1997)  
National Beef Infobase Organizing Committee (1997)  
American Society of Animal Science, Member  
National Cattlemen's Association, Member  
Gamma Sigma Delta, Member

University

Extension Title Series Tenure, Promotion and Appointment Committee (2017-2019)

College

Performance Evaluation Appeals Committee, (2018 - 2020) Chair (2019-2020).  
College of Agriculture ad hoc committee to develop online Master of Agriculture degree program (2019-2020)  
Ag Faculty Council (2014-2016)  
    Chaired Promotion and Tenure Workshop (2015 and 2016)  
    Chaired Extension Promotion Packet Workshop (2016)  
College of Agriculture Tenure, Promotion and Appointment Committee (2007-2009)  
Member Integrated Resource Management Core Coordinating Committee (1995-present)  
County program review committee (2007)  
Co-Chair, Quick Response Team – Development of information on BSE (2003-04)  
County program review committee (2001)  
Association of Kentucky Extension Specialists, Board of Directors (1997)  
Association of Kentucky Extension Specialists Awards Committee (1995)

Department

Beef Group Coordinator (2002-present)  
Recognition and Awards Committee (1994-1998, 2002-present) Chair (2018-present)  
Animal and Food Sciences Advisory Council (2016-2021)  
Beef Nutrition Extension Position Committee, (2019)  
Beef Extension Coordinator (2001-2015)  
Food Science Extension Position Committee (2014)  
Beef Nutrition Extension Position Committee, Chair (2008)  
Represented Beef Group at Ag Advisory Council meetings (2007, 2008)  
Equine Extension Position Committee (2007)  
Editor, 2004 Beef Research and Extension Report (2004)  
Curriculum Committee (1998-2001)  
Co-editor 2000 and Editor 2002 UK Beef Research Report (2000 and 2002)

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Developed Animal Sciences Extension Report (2002)  
United Way floor solicitor (1995)