Southern Section
American Society of Animal Science

Scientific Sessions & Business Meeting

Hilton Fort Worth
Fort Worth, TX
February 3 - 6, 2018
Camera, Video Camera and Cell Phone Policy

Use of cameras, video cameras and cell phones (for calls or as cameras) is prohibited during presentations to minimize disruption and unauthorized dissemination of data. Violators may be asked to leave the session/conference. Exceptions to this policy must be approved by the Southern Section Scientific Program Coordinator.
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Washington State University, Pullman, WA

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Dr. Matthew Poore, Southern Section Director
North Carolina State University, Raleigh, NC

Dr. Glenn Duff, Western Section Director
New Mexico State University, Las Cruces, NM

Dr. Chantal Farmer, Director-at-Large
AAFC, Sherbrooke, QC, Canada

Dr. Peter Hansen, Director-at-Large
University of Florida, Gainesville, FL

Dr. Thomas Rathje, Director-at-Large
DNA Genetics, Columbus, NE
Dr. Joseph Cassady, Director-at-Large
South Dakota State University, Brookings, SD

Dr. Joel Caton, Director-at-Large
North Dakota State University, Fargo, ND

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Weldon Consulting, Greenfield, IN

Bailey Engle, Graduate Director
Texas A&M University, College Station, TX

Kelsey Phelps Ronningen, Graduate Director
Cargill, Wichita, KS

Dr. Meghan Wulster-Radcliffe, Chief Executive Officer
American Society of Animal Science, Champaign, IL

Ms. Jacelyn Hemmelgarn, Chief Operations Officer
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University of Arkansas, Hope, AR

Dr. Christy Bratcher, Secretary-Treasurer Elect
Auburn University, Auburn, AL

Dr. Matthew Poore, Southern Section Director
North Carolina State University, Raleigh, NC

Sierra Lockwood, Graduate Student Representative
University of Tennessee, Knoxville, TN

Sam Ingram, Graduate Student Representative
North Carolina State University, Clayton, NC
General Information

Meeting Location
Hilton Fort Worth

Registration
Saturday, February 3 ..................................11:30 AM – 4:00 PM
Sunday, February 4 ......................................7:00 AM – 5:00 PM
Monday, February 5 ......................................7:00 AM – 4:30 PM
Tuesday, February 6 ......................................7:00 AM – 12:00 PM

Hotel Information
Hilton Fort Worth
815 Main St.
Fort Worth, TX 76102
817-870-2100
tinyurl.com/HiltonFTW

Awards Banquet Location
Lil’ Red’s Longhorn Saloon
121 W. Exchange Ave.
Fort Worth, TX 76164
817-740-0078
tinyurl.com/LonghornFTW

Academic Quadrathlon Location
Tarleton State University
1333 W. Washington St.
Stephenville, TX 76401
Academic Quadrathlon
Schedule of Events

Friday, February 2, 2018

9:00 PM  Advisors’ Meeting
           Hilton Fort Worth

Saturday, February 3, 2018

All Day  AQ Lab Practicum and
           Written Exam
           Tarleton State University

Sunday, February 4, 2018

6:30 AM – 12:00 PM  Oral Preparations
                      Rooms: Citizens A, Citizens C,
                      Texas C, and Metropolitan

8:00 AM – 12:00 PM  Oral Presentations
                      Room: Texas B

8:00 AM – 12:00 PM  Quiz Bowl
                      Room: Texas A
# Meeting Schedule of Events

Unless otherwise noted, all events will be held in the Hilton Fort Worth

## Saturday, February 3, 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00 PM – 5:30 PM</td>
<td>Pre-Conference: Integrated Pest Management Symposium</td>
<td>Crystal C</td>
</tr>
<tr>
<td>6:00 PM – 7:00 PM</td>
<td>Integrated Pest Management Symposium Reception</td>
<td>Crystal D</td>
</tr>
</tbody>
</table>

## Sunday, February 4, 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM – 4:00 PM</td>
<td>SCC 81: Sustainable Ruminant Production in the Southeastern United States</td>
<td>Continental</td>
</tr>
<tr>
<td>1:00 PM – 3:35 PM</td>
<td>SERA 041 Symposium: Round Bale Haylage Production Impacts and Economics</td>
<td>Crystal A</td>
</tr>
<tr>
<td>3:35 PM – 6:00 PM</td>
<td>SERA 041 Meeting</td>
<td>Crystal A</td>
</tr>
<tr>
<td>4:00 PM – 5:30 PM</td>
<td>Graduate Student Competition, MS</td>
<td>Texas AB</td>
</tr>
<tr>
<td>5:45 PM – 7:00 PM</td>
<td>Graduate Student Competition, PhD</td>
<td>Texas AB</td>
</tr>
<tr>
<td>5:00 PM – 6:40 PM</td>
<td>Undergraduate Student Competition</td>
<td>Texas CD</td>
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<tr>
<td>Time</td>
<td>Event</td>
<td>Room</td>
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<tr>
<td>8:00 AM – 11:30 AM</td>
<td>Bill E. Kunkle Interdisciplinary Beef Symposium: Recent Advances in Replacement Heifer Development</td>
<td>Texas AB</td>
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<tr>
<td>8:00 AM – 11:05 AM</td>
<td>Small Ruminant Production I</td>
<td>Crystal A</td>
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<tr>
<td>8:00 AM – 10:45 AM</td>
<td>Meats</td>
<td>Crystal B</td>
</tr>
<tr>
<td>8:00 AM – 9:30 AM</td>
<td>Breeding and Genetics</td>
<td>Texas CD</td>
</tr>
<tr>
<td>9:30 AM – 10:00 AM</td>
<td>Coffee Break</td>
<td>West Promenade</td>
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<tr>
<td>10:00 AM – 11:45 AM</td>
<td>Nonruminant</td>
<td>Continental</td>
</tr>
<tr>
<td>1:00 PM – 2:45 PM</td>
<td>Small Ruminant Production II: Parasitology &amp; Health</td>
<td>Crystal A</td>
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<tr>
<td>1:00 PM – 3:00 PM</td>
<td>Pastures and Forages/Conserved Forages</td>
<td>Citizens AB</td>
</tr>
<tr>
<td>1:00 PM – 4:30 PM</td>
<td>Physiology I</td>
<td>Texas CD</td>
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<tr>
<td>1:00 PM – 4:00 PM</td>
<td>Ruminant Animal Production: Health</td>
<td>Texas AB</td>
</tr>
<tr>
<td>1:00 PM – 4:30 PM</td>
<td>Ruminant Animal Production: Cow/Calf</td>
<td>Continental</td>
</tr>
<tr>
<td>2:55 PM – 4:30 PM</td>
<td>Extension I: Demonstrations</td>
<td>Crystal A</td>
</tr>
<tr>
<td>4:30 PM – 5:30 PM</td>
<td>Business Meeting</td>
<td>Crystal A</td>
</tr>
<tr>
<td>6:00 PM – 7:30 PM</td>
<td>Awards Banquet</td>
<td>Offsite: Lil' Red's Longhorn Saloon</td>
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<tr>
<td>8:00 PM – 12:00 AM</td>
<td>Awards Entertainment &amp; Graduate Mixer</td>
<td>Offsite: Lil' Red's Longhorn Saloon</td>
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<tr>
<td>7:00 PM – 9:15 PM</td>
<td>Small Ruminant Subcommittee of NAGP</td>
<td>Continental</td>
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</tbody>
</table>
6:30 AM – 8:00 AM  Extension Breakfast  
   *Room: Texas CD*

8:00 AM – 9:20 AM  Teaching and Undergraduate Education  
   *Room: Texas B*

8:00 AM – 10:45 AM  Extension II: Programs  
   *Room: Crystal A*

8:00 AM – 11:30 AM  Pastures and Forages  
   *Room: Citizens AB*

8:00 AM – 12:20 PM  Physiology II  
   *Room: Continental*

8:00 AM – 11:45 AM  Ruminant Animal Production: Nutrition  
   *Room: Texas A*

9:30 AM – 12:05 PM  Ruminant Animal Production: Weaned Calf  
   *Room: Texas B*

9:30 AM – 10:00 AM  Coffee Break  
   *Room: West Promenade*

11:00 AM – 1:00 PM  Graduate Student Lunch and Learn  
   *Room: Texas CD*

12:30 PM – 3:00 PM  Southern Section Board Meeting  
   *Room: Metropolitan*

**Uploading Presentation Files**

Only PowerPoint presentations will be accommodated (i.e., no slides, no overheads and no alternative programs allowed).

1. All session rooms will have Master PCs running PowerPoint 2013 or newer in Windows.
2. Individual laptops may not be connected to the projectors in the session rooms.
3. Presentations must be given to the session chair via flash drive at least 15 minutes before the start of the session.
Special Events

**Pre-Conference: Integrated Pest Management Symposium**

Saturday, February 3, 2018 • 2:00 PM – 5:30 PM  
*Room: Crystal C*

It is well known that certain insects can be pests of livestock. This symposium will address some of these most economically important insect pest species as well as link some of these insects to disease pathogens of importance that lead to decreased productivity in livestock. It will also aid in providing guidance on developing an effective Integrated Pest Management (IPM) plan for operations and/or producers battling insect pests.

**Integrated Pest Management Reception**

Saturday, February 3, 2018 • 6:00 PM – 7:00 PM  
*Room: Crystal D*

**Business Meeting**

Monday, February 5, 2018 • 4:30 PM – 5:30 PM  
*Room: Crystal A*

The Southern Section business meeting will be held independent of the awards banquet.

**Awards Banquet**

Monday, February 5, 2018 • 6:00 PM – 7:30 PM  
*Offsite: Lil’ Red’s Longhorn Saloon*

Join us for an awards banquet at Lil’ Red’s Longhorn Saloon, for an evening of food, drinks and catching up with friends as we honor the accomplishments of our 2018 Southern Section award winners.

**Awards Entertainment and Graduate Mixer**

Monday, February 5, 2018 • 8:00 PM – 12:00 AM  
*Offsite: Lil’ Red’s Longhorn Saloon*

Join us at Lil’ Red’s Longhorn Saloon for an evening of food, drinks and catching up with friends.

**Ronald D. Randel Lectureship**

The Executive Committee of Southern Section is pleased to announce the establishment of an annual invited lectureship to the Physiology Section. Dr. Randel’s contributions to the field of animal physiology and endocrinology have globally benefited animal agriculture. Dedicating his research career to investigating the reproductive physiology of beef cattle, especially for tropically adapted breeds, Dr. Randel evaluated the role of nutrition on reproduction, elucidated the
fundamental reproductive biology of Brahman cattle, developed strategies to reduce livestock production risks and resolved practical problems in beef cattle reproduction. This year he will be honored by a two-part lectureship at the beginning of each physiology session.

Monday, February 5, 2018 • 1:15 PM – 2:00 PM  
**Room: Texas CD**

**Dr. Carole Mendelson**  
UTSW Medical Center/UTHSC–Dallas  
Ronald D. Randel Lectureship Part I: Fetal-to-Maternal Signaling in the Timing of Birth

**Tuesday, February 6, 2018 • 8:05 AM – 8:50 AM**  
**Room: Continental**

**Dr. Mike Smith**  
University of Missouri  
Ronald D. Randel Lectureship Part II: Reproduction in Domestic Ruminants during the Past 50 Years: Discovery to Application.

**Extension Breakfast**  
**Tuesday, February 6, 2018 • 6:30 AM – 8:00 AM**  
**Room: Texas CD**

The objective of the extension breakfast is to coordinate collaborative forage and livestock educational efforts in the southeastern United States.

The main topics for the 2018 extension breakfast will be:

1. Discuss the committee structure and approval of the 2017 extension luncheon minutes
2. Summary of the abstracts and symposium
3. Planning for the II Forage and Livestock Southeastern Extension Meeting.

**Graduate Student Lunch and Learn**  
**Tuesday, February 6, 2018 • 12:00 PM – 2:00 PM**  
**Room: Texas CD**

The Southern Section Graduate Student Lunch and Learn will provide a unique opportunity for students to obtain valuable information and advice from academic and industry professionals in an exclusive setting. This year’s theme is “Committed to Science.” During this interactive meeting/workshop with fellow graduate students from colleges and universities across the southern section of ASAS, speakers will provide effective tools and strategies for conducting sound research and for communicating the importance of your research to a broad audience.

This year’s speakers:
Dr. Keith Haydon, CJ America  
Dr. Jason Smith, University of Tennessee
PRE-CONFERENCE: INTEGRATED PEST MANAGEMENT SYMPOSIUM

Chairs: Mark Upton, Central Life Sciences; Nicky Oosthuizen, University of Florida, North Florida Research and Education Center

2:00 PM – 6:00 PM
Crystal C

2:00 PM  Welcoming Remarks.

2:05 PM  Overview of Arthropod Pests of Typical Livestock Production Systems.
          C. Holderman*, Central Life Sciences, Dallas, TX

2:35 PM  Benefits of Horn Fly Control in Dairy and Beef Heifers.
          S. C. Nickerson*, University of Georgia, Athens

          C. S. Mooney*, Morrisville State College, Morrisville, NY

3:35 PM  Break.

3:50 PM  Update on Fly Control Practices for Pastured Cattle.
          J. L. Talley*, Oklahoma State University, Stillwater

          C. White*, Central Life Sciences, Dallas, TX

4:50 PM  Break.

5:20 PM  Panel Discussion.

6:00 PM  Reception.
Sunday, February 4, 2018

SERA 041

Chairs: Shane Gadberry, University of Arkansas; Caleb P. Weiss, University of Arkansas

1:00 PM – 6:00 PM
Crystal A

1:00 PM 119 Anti-Quality Factors with Forage Baleage and Grain Crop Silage. A. T. Adesogan*, Department of Animal Sciences, IFAS, University of Florida, Gainesville

1:45 PM 120 Characteristics of and Animal Responses to Warm- and Cool-Season Forage Baleage. R. S. Walker*1 and J. Vendramini2, 1Noble Research Institute, Ardmore, OK, 2UF/IFAS Range Cattle Research and Education Center, Ona, FL

2:30 PM 121 Economics of Baleage with Consideration for Class of Cattle. J. R. Pruitt*, University of Tennessee at Martin, Martin

3:15 PM Panel Discussion.

3:35 PM SERA 041 Meeting.

GRADUATE STUDENT COMPETITION: MS DIVISION

Chair: Nicole C. Burdick Sanchez, USDA-ARS, Livestock Issues Research Unit

4:00 PM – 5:30 PM
Texas AB

4:00 PM Welcoming Remarks.

4:05 PM 20 An Orientation Course with Effort-Based Grading Predicts Undergraduate Student Success in Animal Science. M. J. Mann* and C. J. Kojima, University of Tennessee, Knoxville
Impact of Different Maturity Stages on Yield and Quality of Ensiled Johnson-grass [Sorghum halepense (L.) Pers].
C. Silva¹, M. L. Bass¹, D. W. Hancock², and R. L. Stewart, Jr.¹, ¹University of Georgia, Athens, ²Department of Crop and Soil Sciences, University of Georgia, Athens

Evaluation of a Starter Ration on Growth and Performance of White-Tailed Deer Fawns.
M. A. Sain*¹, K. J. Stutts¹, J. K. Suagee-Bedore¹, M. J. Anderson¹, and J. L. Leatherwood², Sam Houston State University, Huntsville, TX, Texas A&M University, College Station

A. R. Wiseman¹, M. D. Redden, C. M. Spencer, A. L. McGee, R. Reuter, and D. L. Lalman, Oklahoma State University, Stillwater

Grazing Novel or Endophyte-Infected Tall Fescue during Midgestation Impacts Cow Performance.
M. A. Newsome*, R. E. Monn, K. Mayberry, R. K. Poole, Z. Young, M. H. Poore, and D. H. Poole, North Carolina State University, Raleigh

Prediction of Residual Feed Intake in Feedlot Steers Based on Phenotypic Associations with Feeding Behavior and Carcass Ultrasound Traits.
I. L. Parsons*, J. R. Johnson, W. C. Kayser, M. D. Miller, and G. E. Carstens, Texas A&M University, College Station

The Effect of Feeding Ferric Citrate on Rumen Microbial Communities and Methanogenesis in Growing Beef Steers.
E. A. Melchior*¹, K. E. Hales², A. K. Lindholm-Perry², J. E. Wells³, and P. R. Myer¹, ¹University of Tennessee, Knoxville, ²USDA-ARS, Clay Center, NE, ³USDA-ARS U.S. Meat Animal Research Center, Clay Center, NE

Maternal Stress at Weaning Impacts Calf Growth.
G. C. Ott*, S. R. Freeman, M. H. Poore, and C. L. Pickworth, North Carolina State University, Raleigh
4:45 PM 28 Relationships between Antral Follicle Numbers and Postpartum Interval in Multiparous Brahman Cows.
L. K. Quail\textsuperscript{1,2}, M. E. Mund\textsuperscript{1,2}, D. A. Neuendorff\textsuperscript{3}, R. A. d’Orey Branco\textsuperscript{1}, J. P. Banta\textsuperscript{1}, T. H. Welsh, Jr\textsuperscript{1}, and R. D. Randel\textsuperscript{2}, \textsuperscript{1}Texas A&M University, College Station, \textsuperscript{2}Texas A&M AgriLife Research, Overton, \textsuperscript{3}Texas A&M AgriLife Extension, Overton

4:50 PM 29 Pre- and Postweaning Injections of Bovine Somatotropin to Optimize Puberty Achievement of Purebred Bos indicus Beef Heifers.
M. Piccolo\textsuperscript{1}, B. I. Cappellozza\textsuperscript{2}, R. Cooke\textsuperscript{3}, M. Miranda\textsuperscript{4}, R. Carvalho\textsuperscript{4}, E. A. Colombo\textsuperscript{4}, F. Santili\textsuperscript{4}, V. Ferreira\textsuperscript{4}, L. Batista\textsuperscript{4}, R. Filho\textsuperscript{4}, J. L. M. Vasconcelos\textsuperscript{4}, and P. Moriel\textsuperscript{1}, \textsuperscript{1}UF/IFAS Range Cattle Research and Education Center, Ona, FL, \textsuperscript{2}Elanco Saúde Animal, São Paulo, Brazil, \textsuperscript{3}Texas A&M University, College Station, \textsuperscript{4}Department of Animal Production, São Paulo State University, Botucatu, Brazil

4:55 PM 30 Differences in Fecal Egg Count, Performance, Blood Parameters, and Lactate Dehydrogenase Activity of Stocker Calves Treated with Various Anthelmintics.
C. A. Hooks\textsuperscript{1}, N. R. Denney\textsuperscript{1}, M. R. Hovey\textsuperscript{1}, J. F. Miller\textsuperscript{2}, B. M. Papajeski\textsuperscript{1}, J. C. Robertson\textsuperscript{1}, E. A. Backes\textsuperscript{1}, C. A. Porr\textsuperscript{1}, and A. J. Davis\textsuperscript{1}, \textsuperscript{1}Murray State University, Hutson School of Agriculture, Murray, KY, \textsuperscript{2}Murray State University, Hutson School of Agriculture, Breathitt Veterinary Center, Hopkinsville, KY, \textsuperscript{3}Purina Animal Nutrition, LLC, Gray Summit, MO

5:00 PM 31 Prevalence of Internal Parasites in the Feral Hog Population of East Texas.
E. B. Merdian\textsuperscript{‡}, D. R. Ullrich, K. J. Stutts, M. J. Anderson, and M. M. Beverly, Sam Houston State University, Huntsville, TX

5:05 PM 32 Effect of Exercise on Calf Productivity, Health, and Behavior.
E. E. Van Raay\textsuperscript{‡}, J. E. Sawyer, T. A. Wickersham, R. Gill, and C. L. Daigle, Texas A&M University, College Station
5:10 PM  33  
Effect of Supplementing Live Yeast Cultures on the Performance of Weaned Beef Cattle.  
G. M. D’Souza*1, D. R. Eborn1, S. B. Blezinger2, and G. J. Eckerle3, 1Texas A&M University–Commerce, Commerce, 2Reveille Livestock Concepts, Sulphur Springs, TX, 3San Antonio Steel Company, San Antonio, TX

5:15 PM  34  
Relationship of Blood-Borne Markers of Subclinical Infection and Residual Feed Intake Status in Brangus Heifers.  

5:20 PM  
Networking.

UNDERGRAD COMPETITION

Chair: Janeal W. Yancey, University of Arkansas

5:00 PM – 6:40 PM  
Texas CD

5:00 PM  
Welcoming Remarks.

5:05 PM  140  
Effects of Postweaning Mat-Feeding Frequency on Piglet Health and Performance.  
M. A. Nagai* and E. K. Buttrey, University of Tennessee at Martin, Martin

5:10 PM  141  
Effects of Winter Wheat Grazing on Subsequent Crop Yield.  
J. M. Curtis* and E. K. Buttrey, University of Tennessee at Martin, Martin

5:15 PM  142  
Impact of Protein Supplementation on Physiological Response of Steers Consuming Endophyte-Infected Tall Fescue Seed.  
C. M. Womble*, R. K. Poole, D. H. Poole, and C. L. Pickworth, North Carolina State University, Raleigh

5:20 PM  143  
Flushing and Synchronization Protocol Impacts on Out-Of-Season Breeding in Ewes.  
J. Sheffield*, C. Roman, B. L. Roper, R. K. Poole, and C. L. Pickworth, North Carolina State University, Raleigh


5:35 PM 146 Evaluation of Immune Response in Piglets during Processing. M. D. Fuentes*, Tarleton State University, Stephenville, TX

5:40 PM 147 Calpastatin Isoforms Related to Meat Tenderness in Beef Cattle. M. K. Stotz*, B. W. Smith1, K. Herrygers1, C. Bidwell1, J. Brady1, and J. Waddell1, 1Tarleton State University, Stephenville, TX, 2Purdue University, Lafayette, IN, 3Texas A&M University, College Station

5:45 PM 148 Measuring the Impact of a Feeder Calf Board Sale Program through a Survey of Producer Attitudes. K. S. Hyman*, B. B. Karisch2, and D. J. Peterson1, 1University of Arkansas, Fayetteville, 2Mississippi State University, Mississippi State, 3Mississippi State University, School of Human Sciences, Mississippi State

5:50 PM 149 Using Carbon Emissions, Oxygen Consumption, and Energy Retention to Estimate Dietary ME Intake by Beef Steers. C. Burrus*, S. A. Gunter2, D. W. Sanson1, C. A. Moffett1, and P. Gregorini1, 1Southern Arkansas University, Magnolia, 2USDA-ARS, Woodward, OK, 3Lincoln University, Christchurch, New Zealand


6:00 PM 151 Lean Percentage, Storage Times, and Griddle Temperature Affect Raw and Cooked Visual and Instrumental Color and Cooking Loss in Fresh Ground Beef Patties. Z. M. Hicks*, J. W. S. Yancey2, J. A. Apple1, T. M. Johnson1, and B. E. Jenschke2, 1University of Arkansas, Fayetteville, 2Cargill Protein, Monticello, MN
6:05 PM 152 Effects of Group Housing on Sow Production and Behavior.
M. A. Martino*, D. L. Peery, Z. T. Poynter, C. A. Sanders, C. Powers, and A. K. Sexten, Eastern Kentucky University, Richmond

6:10 PM 53 Progesterone Concentration, Follicle Diameter, and Corpus Luteum Volume in Beef Cows Supplemented with Ca Salts of Soybean Oil.

6:15 PM 154 Efficacy of a Fecal DNA-Based Method to Measure Diet Components in Cattle.
M. M. Drakeley* and R. Reuter, Oklahoma State University, Stillwater

M. K. Gohlke*, W. Z. Nunnelley, H. S. Maxwell, J. E. Bayne, and T. D. Brandebourg, Auburn University, Auburn, AL

6:25 PM Networking.

GRADUATE STUDENT COMPETITION: PHD DIVISION

Chair: Nicole C. Burdick Sanchez, USDA-ARS, Livestock Issues Research Unit

5:45 PM – 7:00 PM Texas AB

5:45 PM Welcoming Remarks.

5:50 PM 35 Effect of Temperament Measures on Feedlot Cattle Performance.
K. Bruno**, L. J. McPhillips1, M. Calvo-Lorenzo2, U. Desilva1, C. R. Krehbiel1, M. M. Rolf2, S. E. Place4, D. L. Step2, R. G. Mateescu2, D. L. VanOverbeke1, and T. C. Husz1, 1Oklahoma State University, Stillwater, 2Elanco Animal Health, Fayetteville, AR, 3Kansas State University, Manhattan, 4National Cattlemen's Beef Association, Centennial, CO, 5Department of Veterinary Clinical Science, Oklahoma State University, Stillwater, 6University of Florida, Gainesville
Quantifying Stress and Anxiety: Development and Validation of a Novel Fear Test for Cattle.
A. Mathias*, L. Forehand, G. E. Carstens, and C. L. Daigle, Texas A&M University, College Station

Effects of Feeding Different Levels of Quebracho (Schinopsis balansae) Extract in a High-Roughage Total Mixed Ration on Manure Gas Emissions.
A. B. Norris¹, L. O. Tedeschi¹, K. D. Casey³, J. C. B. Dubeux Jr.², J. L. Foster⁴, J. P. Muir², and W. E. Pinchak¹, Texas A&M University, College Station, ²Texas A&M AgriLife Research, Amarillo, ³University of Florida, North Florida Research and Education Center, Marianna, ⁴Texas A&M AgriLife Research, Beeville, ⁵Tarleton State University, Stephenville, TX, ⁶Texas A&M AgriLife Research, Vernon

Effect of Forage Source on Digestion and Ruminal Fermentation in Limit-Fed Steers.
C. N. Truelock*, J. E. Sawyer, and T. A. Wickersham, Texas A&M University, College Station

Effects of Growth-Promoting Implants at Branding in Suckling Steers Prior to Weaning.
J. J. Ball*, E. B. Kegley, E. A. Palmer, T. D. Lester, W. Gragg, and J. G. Powell, University of Arkansas, Fayetteville

Forms of Selenium in Vitamin–Mineral Mixes Differentially Affect the Expression of Genes Responsible for Prolactin and ACTH Synthesis in Pituitaries of Steers Grazing Endophyte-Infected Tall Fescue.
Q. Li*, Y. Jia, P. Bridges, and J. C. Matthews, University of Kentucky, Lexington

Effect of Protein Supplementation on Immune Response of Weaned Steers Consuming Endophyte-Infected Tall Fescue Seed.
R. K. Poole*, C. M. Womble, C. L. Pickworth, and D. H. Poole, North Carolina State University, Raleigh
Performance, Health, and Physiological Responses of Newly Weaned Cattle Supplemented with Feed-Grade Antibiotics or Alternative Feed Additives during Feedlot Receiving.
K. M. Schubach*1,2, R. Cooke1, K. A. Souza2, T. F. Schumaher2, N. S. da Silva2, D. W. Bohnert2, and R. Marques2, 1Texas A&M University, College Station, 2Oregon State University–EOARC Burns, Burns

Evaluation of Dietary Trace Mineral Source on Markers of Cartilage Metabolism in Weanling Horses Challenged with Lipopolysaccharide.
A. A. Millican*1, J. L. Leatherwood1, J. A. Coverdale1, C. E. Arnold1, A. N. Bradbery1, K. Fikes1, M. S. Goehring1, E. C. Dickson1, C. M. Latham1, C. J. Hartz1, C. B. Paulk2, T. H. Welsh, Jr1, S. H. White1, C. K. Larson1, E. D. Lamprecht1, and T. A. Wickersham1, 1Texas A&M University, College Station, 2Kansas State University, Manhattan, 2Zinpro Corporation, Eden Prairie, MN, 4Cargill Incorporated, Elk River, MN

The Form of Selenium in Free-Choice Vitamin–Mineral Mixes Affects the Percentage of Circulating Neutrophils and Lymphocytes in Beef Calves Subjected to Combined Weaning and Shipping Events.
Y. Jia*1, A. A. Adams2, W. R. Burris3, P. Bridges1, and J. C. Matthews1, 1University of Kentucky, Lexington, 2The Gluck Equine Research Center, University of Kentucky, Lexington, 3University of Kentucky, Princeton

Analysis of the Gastrointestinal Tract–Associated Microbiome of Calves Supplemented during the Suckling Phase.
J. M. Lourenço*1, T. J. Kieran2, J. C. McCann3, T. C. Glenn2, and L. Stewart1, 1University of Georgia, Athens, 2University of Georgia Environmental Health Science, Athens, 3University of Illinois at Urbana-Champaign, Urbana

Effects of Packaging Conditions on Volatile Compounds of Raw Beef from Two Muscles.
T. Cramer*, J. F. Legako, J. A. Ponce, and J. C. Brooks, Texas Tech University, Lubbock
Post–AI Supplementation with Ca Salts of Soybean Oil Increases Pregnancy Success in Bos taurus Beef Cows.
A. P. Brandao1,2, R. Cooke1, K. M. Schubach1,2, R. Marques3, K. G. Pohler3, R. Carvalho3, R. L. A. Cerri4, D. W. Bohnert2, and V. R. G. Mercadante5, 1Texas A&M University, College Station, 2Oregon State University–EOARC Burns, Burns, 3University of Tennessee, Knoxville, 4Applied Animal Biology, Faculty of Land and Food Systems, University of British Columbia, Vancouver, BC, Canada, 5Virginia Polytechnic Institute and State University, Blacksburg

Monday, February 5, 2018

BREEDING AND GENETICS

Chairs: Clare Gill, Texas A&M University; Brittni P. Littlejohn, Texas A&M AgriLife Research and Department of Animal Science

8:00 AM – 9:30 AM
Texas CD

8:00 AM  Welcoming Remarks.

8:05 AM  Comparison of Linear Mixed Model and Random Regression Model for Weaning Weight in Hereford Cattle over a United States Longitudinal Gradient.
J. M. Langdon II1, J. S. Delgadillo1, A. D. Herring1,2, H. D. Blackburn3, S. E. Speidel4, S. Sanders5, B. C. Krehbiel4, and D. G. Riley1,2, 1Texas A&M University, College Station, 2Texas AgriLife Research, College Station, 3National Animal Germplasm Program ARS-USDA, Fort Collins, CO, 4Colorado State University, Fort Collins, 5American Hereford Association, Kansas City, MO
Genetic Parameters for Lamb Mortality Associated with Pneumonia.
P. W. Holland¹, L. L. Hulsman Hanna², K. A. Vonnahme², L. P. Reynolds², J. B. Taylor³, and D. G. Riley¹, ¹Texas A&M University, College Station, ²North Dakota State University, Fargo, ³USDA-ARS, Rangeland Sheep Production Efficiency Research, Dubois, ID

Breed Matters: Consistency of Bull Temperament across Time and Relationship between Temperament and Productivity.
R. M. Park¹, G. Toro², and C. L. Daigle¹, ¹Texas A&M University, College Station, ²Sexing Technologies Genetics, Navasota, TX

Heritability Estimations for Intramuscular Fat in Hereford Cattle Using Random Regressions.
J. S. Delgadillo Liberona¹, J. M. Langdon II¹, D. G. Riley¹, H. D. Blackburn², S. E. Speidel³, B. C. Krehbiel¹, S. Sanders², and A. D. Herring¹, ¹Texas A&M University, College Station, ²National Animal Germplasm Program ARS-USDA, Fort Collins, CO, ³Colorado State University, Fort Collins, ⁴National Animal Germplasm Program, National Laboratory for Genetic Resources Preservation, USDA-ARS, Fort Collins, CO, ⁵American Hereford Association, Kansas City, MO

Relationships Between Breeding Soundness Exam Parameters and Exam Results in Angus Bulls.
F. W. Harrelson⁶, K. R. Vencill, P. Prater, and P. L. Harrelson, Morehead State University, Morehead, KY

Networking.
8:00 AM  Welcoming Remarks.

8:05 AM  48 Changes in the U.S. Cow Herd and Their Implications on Heifer Development. 
D. L. Lalman*, A. L. McGee, C. M. Spencer, and A. R. Wiseman, Oklahoma State University, Stillwater

8:50 AM  49 Lessons Learned from University Heifer Development Programs. 
J. D. Rhinehart*, University of Tennessee, Knoxville

9:35 AM  Break.

9:45 AM  50 Nutritional Programming of Puberty in Heifers: Developmental, Genomic, and Functional Implications. 
G. L. Williams1, B. R. C. Alves2, and R. C. Cardoso3, 1Texas A&M AgriLife Research, Beeville, 2University of Nevada, Reno, 3Texas A&M University, College Station

10:30 AM  51 Target Prebreeding Body Weight and Age in Replacement Heifers – Implications of Environment and Management. 
R. S. Walker*, Noble Research Institute, Ardmore, OK

11:15 AM  Discussion.
MEATS

Chairs: Gregg Rentfrow, University of Kentucky; Berlin S. Howell, University of Arkansas

8:00 AM – 10:45 AM
Crystal B

8:00 AM  Welcoming Remarks.

8:05 AM  Evaluation of Production Economics and a Value of Carcasses Processed into Wholesale Cuts from Steers Finished in a Conventional System Compared with Carcasses Processed into Ground Beef from Steers Finished on a Grass-Based System.
T. W. Glascock¹, J. A. Apple¹, J. G. Powell¹, P. A. Beck², J. J. Ball³, T. M. Johnson¹, and J. T. Sawyer¹, ¹University of Arkansas, Fayetteville, ²University of Arkansas Division of Agriculture SWREC, Hope, ³Tarleton State University, Department of Animal Science and Veterinary Technology, Stephenville, TX

8:20 AM  Impact of Packaging Types on Cooked Beef Volatile Flavor Compounds.
K. R. Vierck*, J. F. Legako, J. A. Ponce, and J. C. Brooks, Texas Tech University, Lubbock

8:35 AM  Effects of Packaging Conditions on Volatile Compounds of Raw Beef from Two Muscles.
T. Cramer*, J. F. Legako, J. A. Ponce, and J. C. Brooks, Texas Tech University, Lubbock

8:50 AM  Calpastatin Isoforms Related to Meat Tenderness in Beef Cattle.
M. K. Stotz¹, B. W. Smith¹, K. Herrygers¹, C. Bidwel², J. Brady³, and J. Waddell³, ¹Tarleton State University, Stephenville, TX, ²Purdue University, Lafayette, IN, ³Texas A&M University, College Station

9:05 AM  Lean Percentage, Storage Times, and Griddle Temperature Affect Raw and Cooked Visual and Instrumental Color and Cooking Loss in Fresh Ground Beef Patties.
Z. M. Hicks*, J. W. S. Yancey¹, J. A. Apple¹, T. M. Johnson¹, and B. E. Jenschke², ¹University of Arkansas, Fayetteville, ²Cargill Protein, Monticello, MN

9:20 AM  Beef Muscle and Packaging Type Influence Descriptive Sensory Attributes.
J. A. Ponce*, J. F. Legako, and J. C. Brooks, Texas Tech University, Lubbock

9:35 AM  Break.
9:50 AM  55  Effect of Two Dietary Crude Protein Levels on Finishing Performance, Carcass Characteristics, and Meat Quality of Lambs.  Y. Huang*1, S. Shelby, X. Wang, J. A. Apple, and K. P. Coffey, University of Arkansas, Fayetteville

10:05 AM  56  Proteomic Changes in the Sarcoplasmic Fraction of Three Differentially Color Stable Beef Muscles during Aging.  M. Narayanan Nair*1,2, S. Li1, C. Beach2, G. Rentfrow3, and S. P. Suman3, 1Colorado State University, Fort Collins, 2University of Kentucky, Lexington

10:20 AM  57  The Impact of Consumer Handling Behaviors in Retail Locations and during Vehicular Transport on Fresh Red Meat Temperature, Color, and Palatability.  D. A. Griffing, S. R. Wilkerson*, and C. L. Bratcher, Auburn University, Auburn, AL

10:35 AM  Networking.

SMALL RUMINANT PRODUCTION I

Chairs: Steve P. Hart, Langston University; Emily A. Melchior, University of Tennessee

8:00 AM – 11:05 AM  Crystal A

8:00 AM  Welcoming Remarks.

8:05 AM  22  Evaluation of a Starter Ration on Growth and Performance of White-Tailed Deer Fawns.  M. A. Sain*1, K. J. Stutts1, J. K. Suagee-Bedore1, M. J. Anderson1, and J. L. Leatherwood1, 1Sam Houston State University, Huntsville, TX, 2Texas A&M University, College Station

8:20 AM  122  Quality Parameters of Goat Meat As Influenced by Peanut Skin Supplementation.  D. Kafle1, J. H. Lee1, and B. R. Min1, 1Fort Valley State University, Fort Valley, GA, 2Tuskegee University, Tuskegee, AL

8:35 AM  123  Small Ruminant Beginning Farmer Training.  N. C. Whitely1, L. Davies2, J. Gaskin2, T. Waldrop2, F. Connelly2, T. Seanima2, A. Speir2, M. Stephens2, A. Tedrow2, P. Burke2, S. Butcher2, M. Sheffield2, J. Dawson1, and K. Hammond2, 1Fort Valley State University, Fort Valley, GA, 2University of Georgia Extension, Athens, 3Georgia Department of Education, Tifton, 4Georgia Organics, Atlanta
8:50 AM  124  The Effect of Water Restriction at Weaning on Hair Sheep Ewes and Lambs in the Tropics. R. W. Godfrey*, S. A. Lakos, and S. R. Joseph, Agricultural Experiment Station, University of the Virgin Islands, St. Croix, U.S. Virgin Islands


9:20 AM  Break.

9:35 AM  126  Effect of Sire Breed on Gain, Carcass Characteristics, and Parasite Resistance of Katahdin Crossbred Feedlot-Finished Lambs: Year 3. C. L. Maierle1*, J. J. Garza1, E. A. Shepherd1, B. Russ1, D. Middleton1, A. M. Zajac2, S. P. Greiner2, and S. A. Bowridge1, 1West Virginia University, Morgantown, 2Virginia Polytechnic Institute and State University, Blacksburg

9:50 AM  127  Effect of Terminal Sire Breed on Feed Efficiency in Katahdin Crossbred Feedlot-Finished Lambs. C. L. Maierle*, West Virginia University, Morgantown

10:05 AM  128  Effects of Level of Brackish Water and Salinity on Feed Intake, Digestion, and Heat Energy in Growing Boer Goat Wethers and Mature Boer Goat and Katahdin Sheep Wethers. H. Yirga1,2, R. Puchala1, Y. Tsukahara1, K. Tesfai1, T. Sahlu1, U. L. Mengistu2, and A. L. Goetsch*1, 1American Institute for Goat Research, Langston University, Langston, OK, 2Department of Animal and Range Sciences, Haramaya University, Dire Dawa, Ethiopia

10:20 AM  129  Evaluation of Terminal Sire Breeds for Hair Sheep Production Systems on Lamb Birth, Weaning, and Grazing Performance: Year 3. A. R. Weaver1*, D. L. Wright1, D. R. Notter1, A. M. Zajac1, S. A. Bowridge2, and S. P. Greiner1, 1Virginia Polytechnic Institute and State University, Blacksburg, 2West Virginia University, Morgantown
The Effects of Dietary Octacosanol on Ram Semen Quality Parameters.
C. M. Harris*, C. A. Runyan, and J. W. Dickison, Angelo State University, San Angelo, TX

Networking.

NONRUMINANT NUTRITION

Chair: Bryan Kutz, University of Arkansas; Kaitlyn M. Sarlo, Texas A&M University

10:00 AM – 11:45 AM
Continental

Welcoming Remarks.

Effects of Postweaning Mat-Feeding Frequency on Piglet Health and Performance.
M. A. Nagai* and E. K. Buttrey, University of Tennessee at Martin, Martin

Evaluation of Immune Response in Piglets during Processing.
M. D. Fuentes*, Tarleton State University, Stephenville, TX

Effects of Group Housing on Sow Production and Behavior.
M. A. Martino*, D. L. Peery, Z. T. Poynter, C. A. Sanders, C. Powers, and A. K. Sexten, Eastern Kentucky University, Richmond

Evaluation of Dietary Trace Mineral Source on Markers of Cartilage Metabolism in Weanling Horses Challenged with Lipopolysaccharide.
A. A. Millican1*, J. L. Leatherwood1, J. A. Coverdale1, C. E. Arnold1, A. N. Bradbery1, K. Fikes1, M. S. Goehring1, E. C. Dickson1, C. M. Latham1, C. J. Hartz1, C. B. Paulk2, T. H. Welsh, Jr.1, S. H. White1, C. K. Larson3, E. D. Lamprecht4, and T. A. Wickersham1, 1Texas A&M University, College Station, 2Kansas State University, Manhattan, 3Zinpro Corporation, Eden Prairie, MN, 4Cargill Incorporated, Elk River, MN
Validation of Glucometer Technology for Measurement of Glycemia during Glucose Tolerance Tests and Endotoxin Challenge in Pigs.
M. K. Gohlke*, W. Z. Nunnelley, H. S. Maxwell, J. E. Bayne, and T. D. Brandebourg, Auburn University, Auburn, AL

Prevalence of Internal Parasites in the Feral Hog Population of East Texas.
E. B. Merdian*, D. R. Ullrich, K. J. Stutts, M. J. Anderson, and M. M. Beverly, Sam Houston State University, Huntsville, TX

Networking.

PASTURES AND FORAGES: CONSERVED FORAGES

Chairs: Paul A. Beck, University of Arkansas; Jose M. Diaz, University of Arkansas

1:00 PM – 3:00 PM
Citizens AB

1:00 PM  Welcoming Remarks.

1:05 PM  Impact of Different Maturity Stages on Yield and Quality of Ensiled Johnsongrass [Sorghum halepense (L.) Pers].
C. Silva*, M. L. Bass1, D. W. Hancock2, and R. L. Stewart, Jr.1, 1University of Georgia, Athens, 2Department of Crop and Soil Sciences, University of Georgia, Athens

1:20 PM  Comparison of a Full Season and Early Maturing Forage Sorghum Silage with Corn Silage for Growing Cattle.
S. Ingram* and M. Poore, North Carolina State University, Raleigh

1:35 PM  Effects of Delayed Wrapping and Moisture Content on Intake and Digestibility of Ryegrass Silage by Growing Lambs.
M. A. Hays1, K. P. Coffey1, P. A. Beck2, W. K. Coblenz3, C. P. Weiss1, T. S. Crook1, and D. Philipp1, 1University of Arkansas, Fayetteville, 2University of Arkansas, Hope, 3USDA-ARS, U.S. Dairy Forage Research Center, Marshfield, WI
T. J. Hendricks1, J. J. Tucker2, D. W. Hancock3, and L. Stewart1, 1University of Georgia, Athens, 2University of Georgia–Tifton, Tifton, 3University of Georgia, Department of Crop and Soil Sciences, Athens

Feeding Alfalfa Hay Improves Nursing Performance of Awassi Ewes and Performance of Growing Lambs When Used As a Source of Roughage Compared with Wheat Straw.
B. S. Obeidat*1, H. S. Subih1, and J. B. Taylor2, 1Jordan University of Science and Technology, Irbid, Jordan, 2USDA-ARS, Rangeland Sheep Production Efficiency Research, Dubois, ID

Time of Wrapping and the Use of Fermentation Enhancers on Forage Preservation Characteristics of Annual Ryegrass Baleage.
M. E. Griffin*1, K. Mullenix1, L. Roth2, J. B. Elmore3, K. M. Mason1, and L. C. Burdette4, 1Auburn University, Auburn, AL, 2Provimi North America, Montgomery, MN, 3Alabama Cooperative Extension System, Auburn, 4E.V. Smith Research Center, Shorter, AL

Evaluation of Warm-Season Annual Baleage in a Cow/Calf Production System.
M. S. Hargaden*1, M. K. Mullenix1, C. G. Prevatt2, R. W. Peacock1, S. Moisa1, and R. B. Muntifering1, 1Auburn University, Auburn, AL, 2University of Florida, Ona

Networking.
1:00 PM  Welcoming Remarks.

1:15 PM  76  Fetal-to-Maternal Signaling in the Timing of Birth.
C. R. Mendelson*, A. P. Montalbano, and L. Gao, Depts. of Biochemistry and Ob-Gyn, Univ. Texas Southwestern Medical Center, Dallas, and Dept. of Physiology, Second Military Medical University, Shanghai, China

2:00 PM  29  Pre- and Postweaning Injections of Bovine Somatotropin to Optimize Puberty Achievement of Purebred Bos indicus Beef Heifers.
M. Piccolo*, B. I. Cappellozza, R. Cooke, M. Mirando, R. Carvalho, E. A. Colombo, F. Santilli, V. Ferreira, L. Batista, R. Filho, J. L. M. Vasconcelos, and P. Moriel, UF/IFAS Range Cattle Research and Education Center, Ona, FL, Elanco Saúde Animal, São Paulo, Brazil, Texas A&M University, College Station, Department of Animal Production, São Paulo State University, Botucatu, Brazil

2:15 PM  36  Quantifying Stress and Anxiety: Development and Validation of a Novel Fear Test for Cattle.
A. Mathias*, L. Forehand, G. E. Carstens, and C. L. Daigle, Texas A&M University, College Station

2:30 PM  28  Relationships between Antral Follicle Numbers and Postpartum Interval in Multiparous Brahman Cows.
L. K. Quail*, M. E. Mund, D. A. Neuendorff, R. A. d’Orey Branco, J. P. Banta, T. H. Welsh, Jr., and R. D. Randel, Texas A&M University, College Station, Texas A&M AgriLife Research, Overton, Texas A&M AgriLife Extension, Overton
Effects of Supplementing Various Ratios of Polysaturated Fatty Acids to In Vitro Production of Bovine Embryos.

Influence of Synchronization of Ovulation and Pregnancy on Concentrations of Corticosteroid-Binding Globulin in Beef Heifers.
S. A. Lockwood*, H. G. Kattesh, K. G. Pohler, and J. D. Rhinehart, University of Tennessee, Knoxville

The Effects of the DFM Clostat® and Experimental Salmonella Challenge on the Microbiome of the Ileum in Weaned Holstein Steer Calves.
P. R. Broadway*1, J. A. Carroll1, N. C. Burdick Sanchez1, T. R. Callaway2, S. D. Lawhon3, L. K. Bryan1, E. V. Gart1, H. D. Hughes4, J. E. Hergenreder5, P. W. Rounds5, and K. E. Griswold6, 1USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, 2University of Georgia, Athens, 3Texas A&M University, Department of Veterinary Pathobiology, College Station, 4SciWrite Consulting, Canyon, TX, 5Kemin Industries, Des Moines, IA

Comparison of Three Methods of Determining Feed Efficiency on Productivity of Brahman Heifers.
S. E. O’Daniel*1, D. G. Riley1, D. A. Neuendorff2, T. D. Forbes1, J. P. Banta4, T. H. Welsh, Jr1, F. M. Rouquette, Jr2, and R. D. Rande3, 1Texas A&M University, College Station, 2Texas A&M AgriLife Research, Overton, 3Texas A&M AgriLife Research, Uvalde, 4Texas A&M AgriLife Extension, Overton

Effects of IGF1 on Proliferation, Fusion, and Protein Synthesis in Equine Satellite Cells.
A. Pyne*, P. Helsel1, and S. E. Johnson1, 1Virginia Tech, Blacksburg

Equine Trophoblast Cells and Their Role in Fetal–Maternal Recognition.
S. Bonometti, B. C. Menarim, A. M. Brandt*, A. D. Ealy, and S. E. Johnson, Virginia Tech, Blacksburg
Post–AI Supplementation with Ca Salts of Soybean Oil Increases Pregnancy Success in Bos taurus Beef Cows.

A. P. Brandao1,2, R. Cooke1, K. M. Schubach1,2, R. Marques1, K. G. Pohler1, R. Carvalho3, R. L. A. Cerri4, D. W. Bohnert2, and V. R. G. Mercadante5, 1Texas A&M University, College Station, 2Oregon State University–EOARC Burns, Burns, 3University of Tennessee, Knoxville, 4Applied Animal Biology, Faculty of Land and Food Systems, University of British Columbia, Vancouver, BC, Canada, 5Virginia Polytechnic Institute and State University, Blacksburg

RUMINANT ANIMAL PRODUCTION: COW–CALF

Chairs: Philipe Moriel, UF/IFAS, Range Cattle Research and Education Center; Juliana Ranches, UF/IFAS Range Cattle Research and Education Center

1:00 PM – 4:30 PM
Continental

1:00 PM Welcoming Remarks.

1:05 PM Production and Economic Effects of Developing Heifers on Three Different Levels of Single Stair-Step Nutrition Programs.

E. J. Stribling1, T. A. Wickersham1, R. C. Cardos1, and J. E. Sawyer1,2, 1Texas A&M University, College Station, 2Texas AgriLife Research, College Station

1:20 PM Implementing Shade and Slick Hair Phenotypes Improves Heifer Performance.


1:35 PM Effect of Forage Type and Supplement Frequency on Heifer Growth and Reproductive Performance.

M. J. Hersom* and J. V. Yelich, Department of Animal Sciences, University of Florida, Gainesville

1:50 PM Effects of Diet Type on Nutrient Utilization and Energy Balance of Limit-Fed Bred Heifers in a Drylot.

J. R. Baber1, T. A. Wickersham1, J. E. Sawyer1, H. C. Freetly2, and K. E. Hales3, 1Texas A&M University, College Station, 2USDA-ARS, U.S. Meat Animal Research Center, Clay Center, NE
A. R. Wiseman*, M. D. Redden, C. M. Spencer, A. L. McGee, R. Reuter, and D. L. Lalman, Oklahoma State University, Stillwater

Impacts of Estrus Expression during a Timed-AI Protocol on Variables Associated with Fertility and Pregnancy Success in Bos indicus Beef Cows.
K. M. Schubach*1,2, R. Cooke1, A. P. Brandao1,2, R. Marques2, and R. L. A. Cerri3, 1Texas A&M University, College Station, 2Oregon State University–EOARC Burns, Burns, 3Applied Animal Biology, Faculty of Land and Food Systems, University of British Columbia, Vancouver, BC, Canada

J. Ranches*1, J. S. Drouillard2, L. D. Silva2, G. Zylberlicht2, A. D. Moreira1, J. S. Heldt4, and J. D. Arrington1, 1UF/IFAS Range Cattle Research and Education Center, Ona, FL, 2Kansas State University, Manhattan, 3Micronutrients, Indianapolis, IN

Evaluation of Net Returns to Risk and Management in an Intensified Cow-Calf Production System.
A. L. McGee*1, J. R. Cole1, C. L. Bayliff1, M. D. Redden1, C. M. Spencer1, A. R. Wiseman1, J. G. Warren1, R. Reuter1, D. Doye1, G. W. Horn1, and D. L. Lalman1, 1Oklahoma State University, Stillwater, 2Oklahoma Agricultural Experiment Station, Stillwater

Effect of a Hydrolyzed Yeast Product on Body Weight, Body Condition Score, and Hair Coat Score in Cows Grazing Endophyte-Infected Tall Fescue.
P. L. Harrelson*1, C. B. Rogers1, R. A. Martin2, B. N. Bosley1, F. M. Kilgallin1, and F. W. Harrelson1, 1Morehead State University, Morehead, KY, 2Gro-Tec Inc., Modoc, IN

Effects of Dietary Energy Density and Intake on Energy Requirements in Beef Cows.
L. A. Trubenbach*, T. A. Wickersham, V. P. Briani, and J. E. Sawyer, Texas A&M University, College Station
T. S. Crook¹, P. A. Beck², M. S. Gadberry³, M. B. Sims², B. Stewart², C. Shelton², D. J. McLean¹, J. D. Chapman¹, and J. E. Koltes⁶, ¹University of Arkansas, Fayetteville, ²University of Arkansas Division of Agriculture SWREC, Hope, ³University of Arkansas, Little Rock, ⁴Phibro Animal Health Corporation, Teaneck, NJ, ⁵Phibro Animal Health Corporation, Quincy, IL, ⁶Iowa State University, Ames

3:50 PM 109 Effects of Year-Round Supplementation of Sugarcane Molasses and Range Cubes on Growth Performance and Physiological Parameters of Pregnant Beef Cows.
P. Moriel¹, M. Piccolo¹, M. Vedovatto², J. Warren¹, and J. Vendramini¹, ¹UF/IFAS Range Cattle Research and Education Center, Ona, FL, ²Federal University of Mato Grosso do Sul, Campo Grande, Brazil

4:05 PM 110 Evaluation of Angus Calf Performance Based on Dams’ Tolerance or Susceptibility to Fescue Toxicosis.
K. Mayberry¹, P. Khanal¹, M. H. Poore¹, N. V. L. Serão², and D. H. Poole¹, ¹North Carolina State University, Raleigh, ²Iowa State University, Ames

4:20 PM Networking.

Ruminant Animal Production: Health

Chairs: J. Daniel Rivera, Mississippi State University South Branch Experiment Station; Ira L. Parsons, Texas A&M University

1:00 PM – 4:00 PM Texas AB

1:00 PM Welcoming Remarks.

1:05 PM 32 Effect of Exercise on Calf Productivity, Health, and Behavior.
E. E. Van Raay*, J. E. Sawyer, T. A. Wickersham, R. Gill, and C. L. Daigle, Texas A&M University, College Station
1:20 PM 34 Relationship of Blood-Borne Markers of Subclinical Infection and Residual Feed Intake Status in Brangus Heifers.

1:35 PM 44 The Form of Selenium in Free-Choice Vitamin–Mineral Mixes Affects the Percentage of Circulating Neutrophils and Lymphocytes in Beef Calves Subjected to Combined Weaning and Shipping Events.
Y. Jia†, A. A. Adams‡, W. R. Burris§, P. Bridges¶, and J. C. Matthews¶, †University of Kentucky, Lexington, ‡The Gluck Equine Research Center, University of Kentucky, Lexington, §University of Kentucky, Princeton

1:50 PM 95 Assessment of On-Arrival Vaccination and Deworming on Stocker Cattle Health and Growth Performance.
R. T. Wagner*†, B. B. Karisch†, J. R. Blanton†, A. Woolums†, D. R. Smith†, and R. Kaplan‡, †Mississippi State University, Mississippi State, ‡University of Georgia, Athens

2:05 PM 97 Effect of a Combination of Live Yeast and Yeast Cell Wall Products Supplemented Before and After Weaning on Heifer Growth Performance and Heat Stress.
E. A. Palmer*†, E. B. Kegley†, P. A. Beck‡, J. J. Ball†, J. E. Koltes†, S. Chewning†, J. A. Hornsby†, J. L. Reynolds†, B. P. Shoulders†, M. D. Cravey†, and J. G. Powell†, †University of Arkansas, Fayetteville, ‡University of Arkansas Division of Agriculture SWREC, Hope, †Iowa State University, Ames, ‡Phileo Lesaffre Animal Care, Milwaukee, WI

2:20 PM 98 Effect of Yeast, Astragalus Polyaccharin, and Tulathromycin Administration on Receiving Performance and Physiological Responses of Transported Heifers.
X. Wu‡‡, P. A. Beck†, and Q. Meng‡, †College of Animal Science and Technology, China Agricultural University, Beijing, China, ‡University of Arkansas, Fayetteville, ‡University of Arkansas Division of Agriculture SWREC, Hope, ‡China Agricultural University, Beijing, China
Effects of Live Yeast Supplementation on Complete Blood Cell Count and Febrile Responses in Heifers After Viral–Bacterial Respiratory Challenge.

W. C. Kayser1, G. E. Carstens1, K. E. Washburn2, S. D. Lawhon3, S. M. Reddy4, A. L. Skidmore4, E. Chevaux4, and W. E. Pinchak5, 1Texas A&M University, College Station, 2Department of Large Animal Clinical Sciences, Texas A&M University, College Station, 3Department of Veterinary Pathobiology, Texas A&M University, College Station, 4Lallemand Animal Nutrition, Milwaukee, WI, 5Texas A&M AgrLife Research, Vernon

Fecal Egg Counts and Performance of Stocker Calves Treated with Various Anthelmintics.

C. A. Hooks1, N. R. Denney1, M. R. Hovey1, B. M. Papajeski1, J. C. Robertson1, E. A. Backes2, C. A. Porr1, and A. J. Davis1, 1Murray State University, Hutson School of Agriculture, Murray, KY, 2Purina Animal Nutrition, LLC, Gray Summit, MO

Physiologic and Innate Immunity Responses of Beef Heifers Supplemented with an Immunomodulatory Feed Ingredient during a Lipopolysaccharide Challenge.

A. P. Brandao1,2, R. Cooke1, K. M. Schubach1,2, K. A. Souza2, T. F. Schumaher2, N. S. da Silva2, D. W. Bohnert1, and R. Marques2, 1Texas A&M University, College Station, 2Oregon State University–EOARC Burns, Burns


K. Vincent1, D. Roper, D. Snyder, T. Jones, and B. Talsma, Tarleton State University, Stephenville, TX

Determination of the Optimal Stage of Lactation for Infectious Bovine Keratoconjunctivitis Vaccination.

A. R. Dhom1, L. A. Flatow, M. E. Griffin, W. M. Gribble, and J. C. Stucky, Berry College, Mount Berry, GA

Networking.
1:00 PM
Welcoming Remarks.

1:05 PM 131  Genetic Parameters for Ewe Reproductive Performance and Periparturient Fecal Egg Counts and Their Genetic Relationships with Lamb Body Weights and Fecal Egg Counts in Katahdin Sheep.
L. Ngere1,2, J. M. Burke3, J. E. Miller4, J. L. M. Morgan5, and D. R. Notter6,
1USDA-ARS, Booneville, AR, 2Oak Ridge Institute for Science and Education, Oak Ridge, TN, 3Louisiana State University, Baton Rouge, 4Round Mountain Consulting Service, Fayetteville, AR, 5Katahdin Hair Sheep Institute, Fayetteville, AR, 6Virginia Polytechnic Institute and State University, Blacksburg

1:20 PM 132  Physical Characteristics to Predict Survivability in Newborn White-Tailed Deer Fawns.
K. J. Stutts1, E. E. Evers1, J. L. Leatherwood2, C. R. Stewart1, and M. J. Anderson1, 1Sam Houston State University, Huntsville, TX, 2Texas A&M University, College Station

1:35 PM 133  Efficacy of Compound X (Bedoukian Research, Inc.) on Reducing Fecal Egg Count in Lambs.
M. M. France1, V. E. Kelly1, J. E. Miller2, J. M. Burke2, and K. M. McKenzie3, 1Louisiana State University, Baton Rouge, 2USDA-ARS, Booneville, AR, 3Bedoukian Research, Inc., Danbury, CT

1:50 PM 134  Examining Relationships between Production and Gastrointestinal Nematode Measures in Organic and Conventionally Reared Katahdin Lambs.
J. M. Burke1, A. T. Pickett2, B. S. Howell3, E. L. Wood1, M. Acharya1, and J. E. Miller4, 1USDA-ARS, Booneville, AR, 2Southern Arkansas University, Magnolia, 3University of Arkansas, Fayetteville, 4Oakridge Institute for Science and Education, Oakridge, TN, 5Louisiana State University, Baton Rouge
2:05 PM  Incidence of Ovine Progressive Pneumonia in a Flock of Landrace Hair Sheep: Impact on Performance and Implications for Mode of Transmission.
S. Wildeus1 and G. Tessema2, 1Virginia State University, Petersburg, 2Virginia Department of Agriculture and Consumer Services, Warrenton, VA

2:20 PM  Seasonal Effects on Daily Gain and Fecal Egg Counts in Purebred and Crossbred Hair Sheep Lambs on Pasture.
S. Wildeus1, D. O’Brien1, and C. D. Teutsch2, 1Virginia State University, Petersburg, 2University of Kentucky Research and Education Center, Princeton

2:35 PM  Networking.

EXTENSION I DEMONSTRATIONS

Chairs: Brandi B. Karisch, Mississippi State University; P. A. Gunter, Auburn University

2:55 PM – 4:30 PM  Crystal A

2:55 PM  Welcoming Remarks.

3:00 PM  A Comparison of Methods for Estimating Forage Mass.
T. Hudspeth1, C. A. Ahrens2, D. S. Hubbell, III3, and S. Gadberry4, 1Arkansas State University, Jonesboro, 2University of Arkansas, Little Rock, 3University of Arkansas Division of Agriculture Livestock and Forestry Research Station, Batesville, 4University of Arkansas System Division of Agriculture, Little Rock

3:15 PM  Hands-On Workshops Spark Producer Interest in Improving Mineral Programs for Beef Cattle.
M. H. Poore*, A. D. Shaeffer, J. R. Rogers, and S. R. Freeman, North Carolina State University, Raleigh

3:30 PM  2017 Winter Forage and Hay Outlook.
C. G. Prevatt1, K. Mullenix2, J. J. Tucker3, D. D. Harmon4, and M. O. Wallau5, 1University of Florida, Ona, 2Auburn University, Auburn, AL, 3University of Georgia–Tifton Campus, Tifton, 4Virginia Polytechnic Institute and State University, Blacksburg, 5University of Florida, Gainesville
Assessment of Performance-Tested Bull Characteristics and Their Effect on Price. 
B. M. Thinguldstad¹, L. Russell¹, J. J. Tucker², G. A. Buono¹, and J. R. Segers², ¹University of Georgia, Athens, ²University of Georgia–Tifton, Tifton

S. P. Hammack¹ and D. B. Griffin², ¹Texas A&M, Stephenville, ²Texas A&M, College Station

Upcycling Bahiagrass Hay Using Cull Potatoes as an Alternative Feed Resource. 

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**Tuesday, February 6, 2018**

**EXTENSION II: PROGRAMS**

*Chairs: Mary K. Mullenix, Auburn University; Katie M. Mason, Auburn University*

8:00 AM – 10:45 AM  
Crystal A

8:00 AM  
Welcoming Remarks.

8:15 AM  
Education for Compliance with the Veterinary Feed Directive: A Report of Extension Effort. 
H. M. Ward and S. Gadberry, University of Arkansas System Division of Agriculture, Little Rock

8:30 AM  
D. A. Tigue¹², L. A. Kriese-Anderson¹, and C. L. Bratcher¹, ¹Auburn University, Auburn, AL, ²Alabama Cooperative Extension System, Guntersville
2017 Southeast Women’s Cattle Handling Program: Alabama Results. 
C. M. Holland1, L. A. Kriese-Anderson1, M. K. Mullenix1, K. Flanders1, S. L. Dillard1, M. Elmore1, G. L. Thompson2, and A. D. Shaeffer3, 1Auburn University, Auburn, AL, 2Alabama Cooperative Extension System, Auburn, 3North Carolina State University, Raleigh

A Stockmanship and Stewardship Regional Event Combined with the Deep South Stocker Conference: Multi-State Extension Programming for Beef Producers. 
B. B. Karisch1, W. C. Rutherford1, R. L. Stewart, Jr.2, and M. K. Mullenix1, 1Mississippi State University, Mississippi State, 2University of Georgia, Athens, 3Auburn University, Auburn, AL

ASAS Southern Section Regional Webinar Series for Extension Agent Training. 
M. K. Mullenix1, M. S. Hargaden1, J. D. Rhinehart3, J. Vendramini3, R. L. Stewart, Jr.2, B. B. Karisch3, and S. Gadberry6, 1Auburn University, Auburn, AL, 2University of Tennessee, Knoxville, 3UF/IFAS Range Cattle Research and Education Center, Ona, FL, 4University of Georgia, Athens, 5Mississippi State University, Mississippi State, 6University of Arkansas System Division of Agriculture, Little Rock

Creating Partnerships with the U.S. Military. 
S. R. Freeman*, L. J. Lahti, and M. Poore, North Carolina State University, Raleigh

On-Farm Workshops Improve Producers’ Understanding of Winter Forage Management Strategies. 
J. R. Rogers*, M. Poore, A. D. Shaeffer, and S. R. Freeman, North Carolina State University, Raleigh

Sustainable Pasture Improvement and Grazing Management Education Program for Farmers. 
U. Karki*, Tuskegee University, Tuskegee, AL

Measuring the Impact of a Feeder Calf Board Sale Program through a Survey of Producer Attitudes. 
K. S. Hyman1, B. B. Karisch2, and D. J. Peterson3, 1University of Arkansas, Fayetteville, 2Mississippi State University, Mississippi State, 3Mississippi State University, School of Human Sciences, Mississippi State
Welcoming Remarks.

Effect of Protein Supplementation on Immune Response of Weaned Steers Consuming Endophyte-Infected Tall Fescue Seed.
R. K. Poole*, C. M. Womble, C. L. Pickworth, and D. H. Poole, North Carolina State University, Raleigh

Forms of Selenium in Vitamin–Mineral Mixes Differentially Affect the Expression of Genes Responsible for Prolactin and ACTH Synthesis in Pituitaries of Steers Grazing Endophyte-Infected Tall Fescue.
Q. Li*, Y. Jia, P. Bridges, and J. C. Matthews, University of Kentucky, Lexington

Grazing Novel or Endophyte-Infected Tall Fescue during Mid Gestation Impacts Cow Performance.
M. A. Newsome*, R. E. Monn, K. Mayberry, R. K. Poole, Z. Young, M. H. Poore, and D. H. Poole, North Carolina State University, Raleigh

Meta-Analysis of Endophyte-Infected Tall Fescue Effects on Cattle Growth Rates.
D. M. Liebe* and R. R. White, Virginia Tech, Blacksburg

Effect of Monensin Level on Mineral Intake and Performance of Grazing Steers.
C. P. Weiss1, P. A. Beck2, T. S. Crook1, S. Gadberry3, T. Hess4, and D. S. Hubbell, III4, 1University of Arkansas, Fayetteville, 2University of Arkansas Division of Agriculture SWREC, Hope, 3University of Arkansas System Division of Agriculture, Little Rock, 4University of Arkansas Division of Agriculture Livestock and Forestry Research Station, Batesville
Effect of Tillage System and Planting Date on Wheat Forage Production and Performance of Grazing Steers.

P. A. Beck*, C. P. Weiss*, T. Hess*, and D. S. Hubbell, III, 1University of Arkansas Division of Agriculture SWREC, Hope, 2University of Arkansas, Fayetteville, 3University of Arkansas Division of Agriculture Livestock and Forestry Research Station, Batesville


P. A. Gunter*, R. W. Peacock, R. B. Muntifering, and M. K. Mullenix, Auburn University, Auburn, AL

Late Planting of Annual Ryegrass in Northern Alabama.


Supplementing Energy in Conjunction with Monensin Improves Sustainability of Stocker Cattle Grazing Winter Wheat.

L. R. Thompson, M. R. Beck, G. D. Williams, S. E. Place, and R. Reuter, 1Oklahoma State University, Stillwater, 2National Cattlemen’s Beef Association, Centennial, CO

Effects of Winter Wheat Grazing on Subsequent Crop Yield.

J. M. Curtis* and E. K. Buttrey, University of Tennessee at Martin, Martin

Impact of Protein Supplementation on Physiological Response of Steers Consuming Endophyte-Infected Tall Fescue Seed.

C. M. Womble*, R. K. Poole, D. H. Poole, and C. L. Pickworth, North Carolina State University, Raleigh

Grazing Patch Intensity of Calves Grazing Tall Fescue with Varied Toxicity and Fescue Stand Percentage.

J. M. Diaz*, University of Arkansas, Fayetteville

Networking.
8:00 AM  Welcoming Remarks.

8:05 AM  Reproduction in Domestic Ruminants during the Past 50 Years: Discovery to Application. M. F. Smith*1 and R. D. Geisert1, 1University of Missouri, Columbia

8:50 AM  Conception Rates in Beef Cattle Inseminated with Either SexedUltra™ Sex-Sorted Semen or Conventional Semen after Estrus Is Synchronized for Fixed-Time Artificial Insemination Using 7-Day CO-Synch. B. R. Crites1, R. Vishwanath2, A. M. Arnett2, P. Bridges1, W. R. Burris1, K. R. McLeod1, and L. Anderson1, 1University of Kentucky, Lexington, 2Sexing Technologies Inc., Navasota, TX, 3University of Kentucky, Princeton

9:05 AM  Conception Rates in Beef Cattle Inseminated with Either SexedUltra™ or Conventional Semen after Ovulation Is Synchronized for Fixed-Time Artificial Insemination Using a 14-Day Cidr–PG Modified Protocol. B. R. Crites1, R. Vishwanath2, A. M. Arnett2, P. Bridges1, W. R. Burris1, and L. Anderson1, 1University of Kentucky, Lexington, 2Sexing Technologies Inc., Navasota, TX, 3University of Kentucky, Princeton

9:20 AM  Supplementation with an All-Natural Saccharomyces cerevisiae Fermentation Product Alters Intraperitoneal Temperature and Serum Proinflammatory Cytokines Following an Oral Salmonella typhimurium Challenge. N. C. Burdick Sanchez*1, J. A. Carroll1, P. R. Broadway1, B. E. Bass2, and J. W. Frank2, 1USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, 2Diamond V, Cedar Rapids, IA

9:35 AM  Break.

10:05 AM  88  Differing Mitochondrial Capacity in Two Separate Skeletal Muscles from Calm and Temperamental Brahman Heifers.  

10:20 AM  89  Does Postabsorptive Propionate Clearance Influence Reproductive Status in Dairy Heifers?  


10:50 AM  91  Influence of Cell Mediated Immune Response of Brahman Cows on Postpartum Interval, Colostral Immunoglobulin Concentration, and Growth of Their Calves.  
M. E. Mund, L. K. Quail, C. L. Cook, D. A. Neuendorff, J. P. Banta, T. H. Welsh, Jr., and R. D. Randle, Texas A&M University, College Station.

11:05 AM  143  Flushing and Synchronization Protocol Impacts on Out-Of-Season Breeding in Ewes.  
J. Sheffield*, C. Roman, B. L. Roper, R. K. Poole, and C. L. Pickworth, North Carolina State University, Raleigh.

11:20 AM  144  Growth Factors Influence Cell Cycle Progression in Equine Satellite Cells.  
M. Gonzalez*, A. M. Brandt, and S. E. Johnson, Virginia Tech, Blacksburg.

11:35 AM  153  Progesterone Concentration, Follicle Diameter, and Corpus Luteum Volume in Beef Cows Supplemented with Ca Salts of Soybean Oil.  
Acute Immunological Responses to a Combined Viral–Bacterial Respiratory Disease Challenge in Heifers Administered Transdermal Flunixin Meglumine.
A. B. Word¹, P. R. Broadway¹, Y. L. Liang², H. Newcomb³, N. C. Burdick Sanchez¹, B. P. Holland⁴, G. B. Ellis⁴, B. P. Littlejohn⁵, S. Capik⁶, A. J. Fuselier³, J. P. Hutcheson³, M. A. Ballou⁴, and J. A. Carroll¹, ¹USDA-ARS, Livestock Issues Research Unit, Lubbock, ²Texas Tech University, Lubbock, ³Merck Animal Health, Summit, NJ, ⁴Cactus Feeders, Amarillo, TX, ⁵Texas A&M University, College Station, ⁶Texas A&M AgriLife Research, Amarillo

RUMINANT ANIMAL PRODUCTION: NUTRITION

Chairs: Stacey A. Gunter, USDA-ARS; Amanda Mathias, Texas A&M University
8:00 AM – 11:45 AM
Texas A

8:00 AM Welcoming Remarks.
8:05 AM Effect of Forage Source on Digestion and Ruminal Fermentation in Limit-Fed Steers. C. N. Truelock*, J. E. Sawyer, and T. A. Wickersham, Texas A&M University, College Station
8:20 AM The Effect of Feeding Ferric Citrate on Rumen Microbial Communities and Methanogenesis in Growing Beef Steers. E. A. Melchior¹, K. E. Hales², A. K. Lindholm-Perry³, J. E. Wells³, and P. R. Myer¹, ¹University of Tennessee, Knoxville, ²USDA-ARS, Clay Center, NE, ³USDA-ARS, U.S. Meat Animal Research Center, Clay Center, NE
8:35 AM Analysis of the Gastrointestinal Tract–Associated Microbiome of Calves Supplemented during the Suckling Phase. J. M. Lourenço¹, T. J. Kieran², J. C. McCann³, T. C. Glenn², and L. Stewart¹, ¹University of Georgia, Athens, ²University of Georgia Environmental Health Science, Athens, ³University of Illinois at Urbana-Champaign, Urbana
Effects of Feeding Different Levels of Quebracho (*Schinopsis balansae*) Extract in a High-Roughage Total Mixed Ration on Manure Gas Emissions.
A. B. Norris*, L. O. Tedeschi†, K. D. Casey‡, J. C. B. Dubeux Jr.*†, J. L. Foster*, J. P. Muir*, and W. E. Pinchak*, †Texas A&M University, College Station, ‡Texas A&M AgriLife Research, Amarillo, †University of Florida, North Florida Research and Education Center, Marianna, ‡Texas A&M AgriLife Research, Beeville, †Texas State University, Stephenville, TX, *Texas A&M AgriLife Research, Vernon

J. R. Baber*, J. E. Sawyer, and T. A. Wickersham, Texas A&M University, College Station

J. R. Baber*, J. E. Sawyer, and T. A. Wickersham, Texas A&M University, College Station

Effects of Bismuth Subsalicylate and Calcium–Ammonium Nitrate on Liver Mineral Concentration and Performance of Growing Beef Heifers.

Establishing the Efficacy of *Faecalibacterium prausnitzii* As a Probiotic to Enhance Prewneaning Health, Growth, and Performance of Beef Calves.
N. W. Dias*, C. L. Timlin, F. V. Santilli, T. B. Wilson, R. R. White, and V. R. G. Mercadante, Virginia Tech, Blacksburg

Effects of Intake Restriction on Thoracic and Abdominal Organ Mass and Metabolism in Cows.
L. A. Trubenbach*, T. A. Wickersham, M. C. Satterfield, S. H. White, J. M. Long, and J. E. Sawyer, Texas A&M University, College Station
Evaluation of Age of Dam and Phytoestrogens on Growth and Semen Quality Measures in Yearling Bulls.
C. A. Runyan*, S. C. Yurrita, J. W. Dickison, and M. W. Salisbury, Angelo State University, San Angelo, TX

Evaluation of the Effects of Dried Live Yeast on Rumen pH and In Situ Digestibility of Dry Matter in Growing Cattle.
C. M. Cagle*, L. O. Tedeschi, C. A. Runyan, T. R. Callaway, and M. D. Cravey, Texas A&M University, College Station, Angelo State University, San Angelo, TX, USDA-ARS, College Station, TX, Phileo Lesaffre Animal Care, Milwaukee, WI

Using Carbon Emissions, Oxygen Consumption, and Energy Retention to Estimate Dietary ME Intake By Beef Steers.
C. Burrus*, S. A. Gunter, D. W. Sanson, C. A. Moffet, and P. Gregorini, Southern Arkansas University, Magnolia, USDA-ARS, Woodward, OK, Lincoln University, Christchurch, New Zealand

Efficacy of a Fecal DNA-Based Method to Measure Diet Components in Cattle.
M. M. Drakeley and R. Reuter, Oklahoma State University, Stillwater

TEACHING AND UNDERGRADUATE EDUCATION

Chairs: Janeal W. Yancey, University of Arkansas; Traci Cramer, Texas Tech University

8:00 AM – 9:20 AM
Texas B

8:00 AM
Welcoming Remarks.

8:05 AM
A Measure of Science Motivation in an Introduction to Animal Science Course.
M. R. Russell, B. Chumbley, and N. L. Bell, University of Arkansas, Fayetteville, Texas A&M University Kingsville, Kingsville

8:20 AM
An Orientation Course with Effort-Based Grading Predicts Undergraduate Student Success in Animal Science.
M. J. Mann and C. J. Kojima, Department of Animal Science, University of Tennessee, Knoxville
8:35 AM  138  Evaluation of a Two-Year Assessment of the University of Arkansas Undergraduate Animal Science Program.  
J. G. Powell*, E. B. Kegley, K. S. Jogan, and L. R. Thomas, University of Arkansas, Fayetteville

8:50 AM  139  Evaluation of Grit and Resilience in Preprofessional Animal Science Students.  
L. R. Thomas1, K. S. Jogan1, K. V. Johnson2, J. J. Ball1, and J. G. Powell1, 1University of Arkansas, Fayetteville, 2University of Arkansas Eleanor Mann School of Nursing, Fayetteville

9:05 AM  Networking.

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RUMINANT ANIMAL PRODUCTION: WEANED CALF

Chairs: Beth Kegley, University of Arkansas; Kingsley Ekwemalor, North Carolina Agricultural and Technical State University

9:30 AM – 12:05 PM  
Texas B

9:30 AM  Welcoming Remarks.

9:35 AM  33  Effect of Supplementing Live Yeast Cultures on the Performance of Weaned Beef Cattle.  
G. M. D’Souza*1, D. R. Eborn1, S. B. Blezinger2, and G. J. Eckerle3, 1Texas A&M - Commerce, Commerce, 2Reveille Livestock Concepts, Sulphur Springs, TX, 3San Antonio Steel Company, San Antonio, TX

9:50 AM  42  Performance, Health, and Physiological Responses of Newly Weaned Cattle Supplemented with Feed Grade Antibiotics or Alternative Feed Additives during Feedlot Receiving.  
K. M. Schubach*1,2, R. Cooke1, K. A. Souza2, T. F. Schumaher2, N. S. da Silva2, D. W. Bohnert2, and R. Marques2, 1Texas A&M University, College Station, 2Oregon State University–EOARC Burns, Burns

10:05 AM  25  Prediction of Residual Feed Intake in Feedlot Steers Based on Phenotypic Associations with Feeding Behavior and Carcass Ultrasound Traits.  
I. L. Parsons*, J. R. Johnson, W. C. Kayser, M. D. Miller, and G. E. Carstens, Texas A&M University, College Station
Differences in Fecal Egg Count, Performance, Blood Parameters, and Lactate Dehydrogenase Activity of Stocker Calves Treated with Various Anthelmintics.
C. A. Hooks1, N. R. Denney1, M. R. Hovey1, J. F. Miller1, B. M. Papajeski1, J. C. Robertson1, E. A. Backes1, C. A. Porr1, and A. J. Davis1, 1Murray State University, Hutson School of Agriculture, Murray, KY, 2Murray State University, Hutson School of Agriculture, Breathitt Veterinary Center, Hopkinsville, KY, 3Purina Animal Nutrition, LLC, Gray Summit, MO

Effect of Temperament Measures on Feedlot Cattle Performance.
K. Bruno1, L. J. McPhillips1, M. Calvo-Lorenzo2, U. Desilva1, C. R. Krehbiel1, M. M. Rolfs, S. E. Place1, D. L. Step2, R. G. Mateescu1, D. L. VanOverbeke1, and T. C. Husz1, 1Oklahoma State University, Stillwater, 2Elanco Animal Health, Fayetteville, AR, 3Kansas State University, Manhattan, 4National Cattlemen’s Beef Association, Centennial, CO, 5Department of Veterinary Clinical Science, Oklahoma State University, Stillwater, 6University of Florida, Gainesville

Effects of Growth Promoting Implants at Branding in Suckling Steers Prior to Weaning.
J. J. Ball*, E. B. Kegley, E. A. Palmer, T. D. Lester, W. Gragg, and J. G. Powell, University of Arkansas, Fayetteville

Maternal Stress at Weaning Impacts Calf Growth.
G. C. Ott*, S. R. Freeman, M. H. Poore, and C. L. Pickworth, North Carolina State University, Raleigh

Effects of an Active Dry Yeast Supplement on Ruminal pH, Feeding Performance, and Carcass Characteristics of Feedlot Steers.
W. L. Crossland1, A. B. Norris1, C. M. Cagle1, L. O. Tedeschi1, G. E. Carstens1, J. E. Sawyer1, T. R. Callaway2, and O. AlZahal1, 1Texas A&M University, College Station, 2University of Georgia, Athens, 3AB Vista, Marlborough, United Kingdom

Networking.
General Committees

Academic Quadrathlon
OK  B.K. Wilson*
GA  J.A. Daniel
TX  D.W. Forrest
KY  P.L. Harrelson

Advisory
AR  M.L. Looper*
GA  J.F. Baker
SC  J.R. Strickland
TX  G.C. Lamb

Necrology
AL  L.W. Greene*
AR  P.A. Beck
TX  W.L. Crossland
MS  R.C. Vann

Nominating
AL  L.W. Greene*
OK  D.L. Lalman
FL  J.D. Arthington
MS  J.A. Parish
AR  C.F. Rosenkrans, Jr.

Resolutions
TX  G.E. Carstens*
NC  M.H. Poore
TX  T.R. Whitney
AL  S.G. Solaiman

*Chair
Award Committees

**Distinguished Service Award**
- OK  S.W. Coleman*
- TX  T.H. Welsh, Jr.
- AR  T.R. Troxel
- OK  G.W. Horn
- TX  D.G. Riley

**Emerging Scholar Award**
- SC  S.K. Duckett*
- TX  V.A. Corriher
- MS  J.E. Larson
- OK  R.R. Reuter
- KY  F.W. Harrelson

**Extension Award**
- KY  L.A. Kriese-Anderson*
- KY  J.W. Lehmkuhler
- TN  J.D. Rhinehart
- TX  J.P. Banta

**Graduate Student Paper Competition**
- TX  N.C. Burdick-Sanchez*
- VA  E.R. Gilbert
- TN  J.T. Mulliniks
- TX  G.R. Newton
- KY  A.J. Davis

**Undergraduate Student Paper Competition**
- AR  J.W. Yancey*
- SC  N.M. Long
- OK  B.K. Wilson
- TX  J.L. Leatherwood
- TN  E.K. Buttrey

**Young Animal Scientist – Education Award**
- TX  K.J. Stutts*
- AL  C.L. Bratcher
- AL  C.E. Huntington
- OK  R. Ramanathan
Young Animal Scientist – Research Award

GA  C.L. Bratcher*
FL  G.C. Lamb
FL  N. DiLorenenzo
TX  J.A. Carroll

Program Committees

Breeding and Genetics

AL  L.A. Kriese-Anderson*
FL  R.G. Mateescu*
MS  T. Smith
AR  B.R. Kutz
TX  C.A. Gill

Extension

MS  B.B. Karisch*
AL  M.K. Mullenix
GA  J.R. Segers
TN  J.K. Smith

Meats

KY  G.K. Rentfrow*
TX  J.F. Legako
GA  A.M. Stelzleni
TX  J.T. Sawyer

Pastures and Forages

AR  P.A. Beck*
LA  G. Scaglia
TX  M.D. Cravey
OK  R.R. Reuter

Physiology

TX  M.R. Garcia*
FL  V.R.G. Mercadante
TX  P.R. Broadway
NC  D.H. Poole

*Chair
Ruminant Animal Production
NC  P. Moriel*
TX  C.A. Bandyk
OK  S.A. Gunter
MS  J.D. Rivera

Small Ruminant Animal Production
OK  S. Hart*
AR  C.A. Ahrens
TN  R. Browning
GA  N.C. Whitley

Teaching and Undergraduate Education
AR  J.W. Yancey*
SC  N.M. Long
OK  B.K. Wilson
TX  J.L. Leatherwood
TN  E.K. Buttrey

*Chair
Past Presidents

2016–17  J. A. Parish  Mississippi State University
2015–16  J. D. Arthington  University of Florida
2014–15  D. L. Lalman  Oklahoma State University
2013–14  L. W. Greene  Auburn University
2012–13  R. W. Godfrey  University of the Virgin Islands
2011–12  T. H. Welsh, Jr.  Texas A&M University
2010–11  M. H. Poore  North Carolina State University
2009–10  D. G. Morrison  Louisiana State University Agricultural Center
2008–09  E. B. Kegley  University of Arkansas
2007–08  C. C. Chase, Jr.  USDA-ARS, STARS
2006–07  D. A. Coleman  Auburn University
2005–06  R. D. Randel  Texas A&M University
2003–05  K. L. Esbenshade  North Carolina State University
2002–03  D. K. Aaron  University of Kentucky
2001–02  T. R. Troxel  University of Arkansas
2000–01  L. L. Southern  Louisiana State University
1999–00  R. P. Wettmann  Oklahoma State University
1998–99  J. D. Armstrong  Purdue University
1997–98  D. G. Ely  University of Kentucky
1996–97  P. R. Harms  Texas A&M University
1995–96  P. R. Utley  University of Georgia
1994–95  D. S. Buchanan  Oklahoma State University
1993–94  P. R. Nolan  University of Arkansas
1992–93  D. R. Marple  Auburn University
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1984–85  C. B. Ammerman  University of Florida
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1986 M. K. Cook Georgia
1985 W. G. Luce Oklahoma
1984 C. Cooper Virginia
1983 C. W. Absher Kentucky
1982 C. M. Triplett Georgia
1981 A. N. Huff Virginia
1980 A. L. Eller, Jr. Virginia

Academic Quadrathlon Winners

2017 Texas Tech University
2016 Texas A&M University
2015 Oklahoma State University
2014 Texas A&M University
2013 Oklahoma State University
2012 Texas A&M University
2010 University of Florida
2009 University of Georgia
2008 University of Kentucky
2007 Texas A&M University
2006 Texas A&M University
2005 North Carolina State University
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**Emerging Scholar Award**

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**Joseph P. Fontenot Student Travel Scholarship**

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**Graduate Student Paper Award**

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Undergraduate Student Paper Award

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2016  F. W. Pohlman  University of Arkansas
2015  T. Rocha  Texas A&M University
2014  K. M. Doran  Berry College
2013  A. Arellano  Texas A&M University
2012  W. B. Smith  Auburn University
2011  J. Tyus  Tennessee State University
2010  W. N. Tapp III  University of Arkansas
2009  C.M. Ballou  North Carolina State University
2008  C.R. Boldt  Texas A&M University
2007  K. Starkey  University of Arkansas
2006  D. Sykes  Mississippi State University
2005  N. Burdick  Texas A&M University-Kingsville
2004  J. L. Roberts  Oklahoma State University
2003  M. Seitz  Mississippi State University
2002  B. Spader  University of Missouri
2001  R. Horsley  Virginia Tech University
2000  B. Robbins  Virginia Tech University
1999  J. L. Bardugone  Virginia Tech University
1998  S. F. Flohr  Virginia Tech University
1997  T. M. Weick  Louisiana State University
1996  K. J. Goodson  Texas A&M University
1995  B. C. Bloom  Auburn University
1994  B. Good  Oklahoma State University
1993  C. J. Kirby  North Carolina State University
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2019

January 26–29 / Oklahoma City, OK