SOUTHERN SECTION

American Society of Animal Science

ANNUAL MEETING

February 6 - 9, 2016 San Antonio, Texas

In conjunction with the 2016 Annual Convention of the Southern Association of Agricultural Scientists

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Undergraduate Paper Competition ASAS Foundation

Graduate Student Research Abstract Competition ASAS Foundation

General Meeting Sponsors Alltech

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PROGRAM EVENTS

Most events will take place at The Hyatt Regency San Antonio Riverfront. Offsite events are noted below.

PROGRAM EVENTS

Friday, February 5

Academic Quadrathlon (AQ) 9:00 PM Advisors Meeting College Station – Location TBD

Saturday, February 6 AQ Lab Practicum and Written Exam Texas A&M University, College Station

Sunday, February 7

AQ Oral Preparation 6:30 AM–12:00 PM Garden Terrace Rooms 123, 125,127 & 129

> AQ Oral Presentation 8:00 AM–12:00 PM Mesquite

AQ Quiz Bowl 8:00 AM–1:00 PM Blanco

AQ Quiz Bowl Championship/Awards and Awards Program 8:00 AM–4:00 PM Llano/Pecos

SCC 81: Sustainable Small Ruminant Production IEG 8:30 AM–4:00 PM Frio

> Registration Regency Ballroom Foyer 11:30 AM–4:00 PM

Cow-Calf Production in the Southeastern US: Potential for Impact and Economic Sustainability Mesquite 1:00 PM–3:30 PM SAAS Board Meeting Rio Grande Ballroom East 2:30 PM–3:30 PM

SAAS Business Meeting Rio Grand Ballroom East 4:00 PM-4:15 PM

SAAS Social (no Super Bowl party this year) 4:15 PM – 5:00 PM

> SERA 41 5:00 PM–6:00 PM Mesquite

SS-ASAS Advisory Committee and Executive Committee Directors 6:00 PM-8:00 PM

Monday, February 8

Registration Regency Ballroom Foyer 7:30 AM–4:00 PM

SS-ASAS Coffee Break Bowie A/B Foyer 9:30 AM–10:30 AM

SS-ASAS Business Meeting and Awards Ceremony Rio Grande Ballroom - Center 5:00 PM–7:00 PM

Small Ruminant Subcommittee of the NAGP Llano/Pecos 7:00 PM–9:15 PM

Tuesday, February 9

SAAS Board Breakfast Meeting La Vista Terrace 7:00 AM–10:00 AM

> Registration Regency Ballroom Foyer 7:30 AM–12:00 PM

Graduate Student Lunch and Learn Garden Terrace 12:00 PM–2:00 PM

> Extension Luncheon La Vista Terrace 12:00 PM–2:00 PM

2016 Symposia

Sunday 1:00 PM - 3:30 PM

Cow-Calf Production in the Southeastern US: Potential for Impact and Economic Sustainability Mesquite

Monday 8:00 AM - 11:55 AM

Bill E. Kunkle Interdisciplinary Beef Symposium Pecan

Monday 2:00 PM - 4:00 PM

Antimicrobial Resistance Maverick A

Tuesday 8:00 AM - 9:00 AM

Management Strategies for Intensive, Sustainable Cow-Calf Production Systems in the Southeastern US Part I Pecan

11:00 AM - 12:00 PM

Management Strategies for Intensive, Sustainable Cow-Calf Production Systems in the Southeastern US Part II Pecan

10:00 AM - 10:45 AM

Submitting higher-quality research publications: Selecting the appropriate research design and following JAS technical guidelines. Pecan

SYMPOSIA AND ORAL SESSIONS

Sunday, February 7

Cow-Calf Production in the Southeastern US: Potential for Impact and Economic Sustainability Chair: Guillermo Scaglia, Louisiana State University Mesquite

1:00 PM Welcoming Remarks

1:10 PM 123 Economic Issues for Southeast Cow-Calf Production *R. C. Lacy', University of Georgia, Tifton, GA*

1:45 PM 124 An Overview of Cow-Calf Production in the Southeast: Forage Systems, Cow Numbers and Calf Marketing Strategies

Calf Marketing Strategies J. P. Banta^{*1}, M. J. Hersom², J. W. Lehmkuhler³, J. D. Rhinehart⁴, and R. L. Stewart, Jr.⁵, ¹Texas A&M AgriLife Extension, Overton, TX, ²University of Florida, Gainesville, FL, ³University of Kentucky, Lexington, KY, ⁴University of Tennessee, Spring Hill, TN, ⁵University of Georgia, Athens, GA

2:20 PM 125 Issues Affecting Research and Extension Programs on Cow-Calf Production in the SE Region

G. Scaglia^{*1}, *P. Beck*², *D. L. Lalman*³, and *F. M. Rouquette*⁴, ¹LSU AgCenter, Jeanerette, LA, ²University of Arkansas, Hope, AR, ³Oklahoma State University, Stillwater, OK, ⁴Texas A&M AgriLife Research, Overton, TX

2:55 PM Panel Discussion

5:00 PM SERA 41 Meeting

Monday, February 8

Bill E. Kunkle Interdisciplinary Beef Symposium

Chair: Lawton Stewart, University of Georgia Pecan

8:00 AM Welcoming Remarks

8:05 AM 119 Assessing the current mineral supplementation needs in pasture-based beef operations in the Southeastern United States. L. W. Greene, Department of Animal Sciences,

Auburn University

8:50 AM 120 **Mineral nutrition of forage-fed beef cattle – Impacts on reproduction.** *J. Arthington, Range Cattle Research and Education*

Center, Ona, University of Florida – IFAS

9:35 AM Break

9:50 AM 121 Impact of mineral and vitamin status on beef cattle immune function and health. E. B. Kegley¹, J. J. Ball¹, and P. A. Beck^{2 1}University of Arkansas Division of Agriculture Department of Animal Sciences, Fayetteville²University of Arkansas Division of Agriculture Southwest Research and

Extension Center, Hope

10:35 AM 122 Assessing the influence of vitamin and mineral nutrition on carcass characteristics and meat quality.

T.E. Lawrence, Department of Agricultural Sciences, West Texas A&M.

Graduate Student Competition MS I

Chair: Christy L. Bratcher Auburn University Chula Vista

8:00 AM 26 Effect of doeling traits at weaning on doe survival and reproductive rates through their first production year in the southeastern United States. P. Khanal¹, M. L. Browning², M. Byars¹, and R. Browning, Jr.¹, ¹Tennessee State University, Nashville, TN, ²Alabama A&M University, Huntsville, AL

8:15 AM 28

Decreasing the frequency and rate of wet brewers grains supplementation did not impact growth but reduced humoral immune response of preconditioning beef heifers.

L. F. Artioli¹, M. Piccolo¹, M. H. Poore², and P. Moriel¹, ¹North Carolina State University, Waynesville, NC, ²North Carolina State University, Raleigh, NC

8:30AM 29 Effect of level of Pongamia seedcake on nutrient utilization in cattle consuming forage. L. E. Bohlen^{*1}, J. E. Sawyer², J. R. Baber¹, L. A. Redmon¹, and T. A. Wickersham¹, ¹Texas A&M University, College Station, TX, ²Texas AgriLife

University, College Station, TX, ²Texas AgriLife Research, College Station, TX

Energy Requirements of Lactating Beef Cows in a Drylot System.

30

C. L. Bayliff^{*1}, M. D. Redden¹, J. R. Cole¹, A. L. McGee¹, R. Reuter², G. W. Horn², and D. L. Lalman¹, ¹Oklahoma State University, Stillwater, OK, ²Oklahoma Agricultural Experiment Station, Stillwater, OK

9:00 AM 31 Effect of time of concentrate delivery on nutrient digestibility, ruminal fermentation, and solid passage rate in limit-fed steers consuming wheat straw.

J. R. Baber^{*1}, J. E. Sawyer², L. A. Trubenbach¹, and T. A. Wickersham¹, ¹Texas A&M University, College Station, TX, ²Texas AgriLife Research, College Station, TX

9:15 AM

8:45 AM

Break

9:30 AM 32 Effects of shoeing on the joints of the lower forelimb and hoof morphology of mature horses. D. K. Proske^{*1}, K. J. Stutts², J. L. Leatherwood², C. J. Hammer³, J. Coverdale⁴, and M. J. Anderson², ¹Sam Houston State University, Huntsville, TX, ²Sam Houston State University, Huntsville, TX, ³North Dakota State University, Fargo, ND, ⁴Texas A&M University, College Station, TX

9:45 AM

Use of ultrasonography to evaluate the accuracy of objective and subjective measures of body composition in horses.

33

K. B. Pritchett^{*}, J. L. Leatherwood, K. J. Stutts, and M. J. Anderson, Sam Houston State University, Huntsville, TX

10:00 AM34Impact of Progesterone Supplementation on
Pregnancy Rates Following Timed AI or Embryo
Transfer in Beef Cattle Consuming Endophyte-
Infected Fescue.

J. C. Mackey, T. L. Devine, P. M. Kennedy, A. M.

Tyson, M. H. Poore, and D. H. Poole, North Carolina State University, Raleigh, NC

10:15 AM 35 Association of DRD2 with Growth and Performance Traits in Cattle Grazing Endophyte-Infected Tall Fescue. *K. Jennings*¹⁷, *C. J. Kojima*¹, *S. L. Pratt*², and *C. Burnett*², ¹University of Tennessee, Knoxville, TN,

Burnett", "University of Tennessee, Knoxville, TN, ²Clemson University, Clemson, SC

10:30 AM 36 Development of an equine non-contact thermography device: Evaluation of thermal expression on multiple sites of the horse as an indicator of body temperature. *H. C. Collins*^{*1,2}, *J. L. Leatherwood*², *M. J. Anderson*²,

*M. M. Beverly*², *F. Yildiz*², and *K. J. Stutts*², ¹Texas A&M University, College Station, TX, ²Sam Houston State University, Huntsville, TX

Graduate Student Competition PhD

Chair: Christy L. Bratcher Auburn University Bowie AB

8:00 AM 45 The effect of weaning stress, sex and temperament on fecal microbiota in Brahman calves.

E. V. Gart^{*1}, T. H. Welsh, Jr.², R. D. Randel³, J. S. Suchodolski⁴, J. Kintzinger⁴, and S. D. Lawhon¹, ¹Department of Veterinary Pathobiology, Texas A&M University, College Station, TX, ²Department of Animal Science, Texas A&M University, College Station, TX, ³Texas A&M AgriLife Research- Overton, Overton, TX, ⁴Veterinary Medicine, Texas A&M University, College Station, TX

8:15 AM 46 **Relationships among temperament, endocrinology, and reproductive soundness of performance-tested Angus bulls.** S. A. Lockwood⁻¹, H. G. Kattesh², J. D. Rhinehart³, P. D. Krawczel¹, D. Kirkpatrick¹, L. Strickland¹, J. B. Wilkerson¹, and A. M. Saxton¹, ¹University of Tennessee, Knoxville, TN, ²Dept. of Animal Science,

University of Tennessee, Knoxville, TN, ³University of Tennessee, Spring Hill, TN

8:30 AM 47

Reproductive measurements of Angus and Angus × Hereford crossbred heifers treated with long-acting eprinomectin or a combination of moxidectin and oxfendazole.

*E. A. Backes*¹, *J. G. Powell*¹, *E. B. Kegley*¹, *T. D. Lester*¹, *A. J. Davis*², *J. A. Hornsby*¹, *J. L. Reynolds*¹, *B. P. Shoulders*¹, *and R. W. Rorie*¹, ¹Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR, ²Murray State University, Murray, KY

8:45 AM 48 Effects of an intensified, semi-confinement cow/calf production system on feedlot performance of growing and finishing steers. *M. D. Redden^{*1}, J. R. Cole¹, A. L. McGee¹, C. L.* Bayliff¹, C. R. Krehbiel¹, G. W. Horn², C. J. Richards¹, and D. L. Lalman¹, ¹Oklahoma State University, Stillwater, OK, ²Oklahoma Agricultural Experiment Station, Stillwater, OK

9:00 AM Break

Graduate Student Competition MS II

Chair: Christy L. Bratcher Auburn University Bowie AB

9:15 AM 37 Composition and Quality Assessment of the Woodland Browse Species and Goats' Performance Study under Woodland. *R. Khatri^{*}, U. Karki, Y. Karki, N. Gurung, and B. R. Min, Tuskegee University, Tuskegee, AL*

9:30 AM 38 Effect of dietary energy intake on nutrient utilization, performance, and maintenance requirements in late gestation cows and their calves.

N. M. Early^{*1}, *J. E. Sawyer*², *L. A. Trubenbach*¹, *C. J. Boardman*¹, *J. R. Baber*¹, *N. L. Bell*¹, and *T. A. Wickersham*¹, ¹Texas A&M University, College Station, TX, ²Texas AgriLife Research, College Station, TX

9:45 AM 39 Effect of surgical castration with or without oral meloxicam on growth, behavior and inflammation in pre-weaned beef calves.

S. L. Roberts¹¹, J. G. Powell², D. S. Hubbell, III³, M. S. Gadberry⁴, P. Beck⁵, E. A. Backes⁶, J. L. Reynolds², and J. T. Richeson¹, ¹Department of Agricultural Sciences, West Texas A&M University, Canyon, TX, ²Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR, ³University of Arkansas Livestock and Forestry Research Station, Batesville, AR, ⁴Department of Animal Science, University of Arkansas, Little Rock, AR, ⁵University of Arkansas SWREC, Hope, AR, ⁶University of Arkansas, Fayetteville, AR

10:00 AM

Heat production, respiratory quotient, and methane loss subsequent to LPS challenge in beef heifers.

beef heifers. *A. W. Altman*^{*1}, *E. S. Vanzant*¹, *J. A. Carroll*², *N. C. Burdick Sanchez*², and *K. R. McLeod*¹, ¹University of *Kentucky, Lexington, KY*, ²USDA-ARS, Livestock *Issues Research Unit, Lubbock, TX*

40

10:15 AM41Evaluations of Savanna Sires Compared withKiko and Spanish Sires for Birth to Weaning MeatGoat Kid Traits.

*E. G. Hayes*¹, *P. Khanal*¹, *R. V. Lourençon*², and *R. Browning*, Jr.¹, ¹*Tennessee State University*, Nashville, TN, ²Universidade Estadual Paulista, Botucatu, Brazil

10:30 AM 42 **Changes in Body Condition from Prepartum to Postpartum on Reproduction in Dairy Cattle.** *M. Wise^{*}, K. Akers, E. Bowdridge, I. Holaskova, and R. A. Dailey, West Virginia University, Morgantown, WV*

10:45 AM 43 **Relationships Between Prolactin Genotypes and Dairy Heifer Growth and Development.** *L. R. Meyer, M. A. Sales, and C. F. Rosenkrans, Jr., Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR*

11:00 AM 44 Inclusion of post-extraction algal residue in finishing rations of beef steers: Consumer sensory panel ratings and fatty acid composition of ground beef.

J. C. Morrill^{*}, J. E. Sawyer, J. R. Baber, S. B. Smith, R. K. Miller, and T. A. Wickersham, Texas A&M University, College Station, TX

Teaching and Undergraduate Education

Chair: Erin G. Brown Stephen F. Austin State University Maverick A

8:00 AM 130 **The use of a mobile app in teaching beef cattle body condition scoring in undergraduate classes.** *N. M. Long', R. E. Long, and S. G. Lawrence, Clemson University, Clemson, SC*

8:15 AM 131 Experiential Learning for Tuskegee University Students: Study Tour of Agricultural Industries. *R. Davis^{*}*, O. Bolden-Tiller, and N. Gurung, Tuskegee University, Tuskegee, AL

8:30 AM 132 Equine Assisted And Affiliated Therapies Provide Service-Learning Opportunities For Students. *M. M. Vogelsang , M. Lazo, K. Harper, and M.* Shehane, Texas A&M University, College Station, TX

8:45 AM 133 Student Performance in Animal Nutrition and Feeds and Feeding Based on Prior Enrollment in Chemistry and Nutrition Courses. J. L. Wahrmund^{*}, Texas A&M University-Commerce,

Commerce, TX

Undergraduate Student Competition

Chair: Erin G. Brown Stephen F. Austin State University Maverick A

9:00 AM 134 **The Influence of a Rider with a Disability on the Equine Walk.** *E. M. Rankins*^{*}, *E. L. Wagner, and W. H. Weimar, Auburn University, Auburn, AL*

9:15 AM 135 **The Effect of Submaximal Exercise on Proliferation of Satellite Cells from Yearling Equids.** *R. L. Ellis', A. Reeg, and S. E. Johnson, Virginia*

Tech, Blacksburg, VA

9:30 AM 136 How frequency of supplementation containing rumen protected fat affects serum fatty acid profiles in beef heifers.

E. K. Cook^{*}, R. E. Ricks, S. K. Duckett, and N. M. Long, Clemson University, Clemson, SC

9:45 AM 137 **The effects of early or mid-gestation nutrient restriction on bovine fetal pancreatic development.** *J. L. Washburn^{*}*, *R. K. Taylor, and N. M. Long, Clemson University, Clemson, SC*

10:00 AM 138 **Effect of processing on the palatability of Pongamia seedcake in cattle.** *E. J. Von Edwins*^{*1}, *J. E. Sawyer*², *L. Bohlen*¹, *J. R. Baber*¹, and T. A. Wickersham¹, ¹Texas A&M University, College Station, TX, ²Texas AgriLife Research, College Station, TX

10:15 AM

Break

10:30 AM 139 A Role for Interleukin-6 mRNA Expression in Caprine Testes. K. Blount^{*}, Tuskegee University, Tuskegee, AL

10:45 AM 140 Evaluation of the effects of dam age on growth performance and carcass traits of crossbred steers.

F. W. Pohlman, II^{*1}, E. A. Backes¹, J. G. Powell¹, F. W. Pohlman, I¹, J. T. Richeson², K. S. Anschutz¹, J. A. Hornsby¹, J. L. Reynolds¹, B. R. Lindsey¹, and B. P. Shoulders¹, ¹Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR, ²Department of Agricultural Sciences, West Texas A&M University, Canyon, TX

11:00 AM 141

The effects of zinc supplementation on feedlot performance, carcass characteristics, and blood metabolites of finishing steers.

K. E. Kennedy^{*1}, *L. R. Thompson*¹, *W. C. Burson*¹, *A. J. Thompson*¹, *J. O. Baggerman*¹, *P. W. Rounds*², *B. J. Johnson*¹, and B. C. Bernhard¹, ¹Texas Tech University, Lubbock, TX, ²Kemin Industries, Inc., Des Moines, IA

11:15 AM 142 Effect of Increasing Dietary Energy Consumption on Intake, Digestion, and Ruminal Fermentation in Limit-Fed Steers.

K. M. Franks^{*}, Texas A&M University, College Station, TX

11:30 AM143Impact of Hydration Supplements on BloodElectrolyte Concentrations of Exercised HorsesDuring the Summer.B. L. Green and J. L. Wahrmund, Texas A&M

B. L. Green and J. L. Wanrmund, Texas A&M University-Commerce, Commerce, TX

11:45 AM 144 Decreasing the frequency of wet brewers grains supplementation during late gestation did not impact cow and pre-weaning calf growth performance.

M. Piccolo^{*1}, L. F. Artioli¹, M. H. Poore², and P. Moriel¹, ¹North Carolina State University, Waynesville, NC, ²North Carolina State University, Raleigh, NC

12:00 PM 145 Evaluation of a Commercial Supplement in Sheep and Goat Twins.

C. Huffman^{*}, N. Facey, S. Adjei-Fremah, K. Ekwemalor, L. Young, E. Asiamah, H. Ismail, and M. Worku, North Carolina Agricultural and Technical State University, Greensboro, NC

12:15 PM 146 Influence of temperament on the cell-mediated immune response in Brahman heifers.

K. C. Garrett^{1,2}, D. A. Neuendorff², A. W. Lewis², S. T. Willard³, T. H. Welsh, Jr.¹, and R. D. Randel², ¹Texas A&M University- Department of Animal Science, College Station, TX, ²Texas A&M AgriLife Research- Overton, Overton, TX, ³Department Animal & Dairy Science, Mississippi State University, Starkville, MS

Breeding and Genetics

Chair: J. G. Powell University of Arkansas Rio Grande Ballroom - Center

1:00 PM

Heritability of temperament at weaning in a

crossbred cattle population. B. P. Littlejohn^{*1,2}, D. G. Riley^{2,3}, T. H. Welsh, Jr.^{3,4}, R. D. Randel⁵, S. T. Willard⁶, and R. C. Vann⁷, ¹Texas A&M AgriLife Research, Overton, TX, ²Texas A&M University Department of Animal Science, College Station, TX, ³Texas A&M AgriLife Research, College Station, TX, ⁴Department of Animal Science, Texas A&M University, College Station, TX, ⁵Texas A&M AgriLife Research- Overton, Overton, TX, ⁶Department Animal & Dairy Science, Mississippi State University, Starkville, MS, ⁷MAFES - Brown Loam Experiment Station, Mississippi State University, Raymond, MS

1:15 PM Effect of Nystatin, a Lipid Raft Inhibitor on Bovine Blood.

E. Asiamah[°], S. Adjei-Fremah, K. Ekwemalor, and M. Worku, North Carolina Agricultural and Technical State University, Greensboro, NC

1:30 PM 3 Genome wide association of beef flavor and tenderness in steaks (with electrical stimulation and without) from carcasses of Nellore-Bos taurus steers.

C. Mantilla Rojas^{*1}, *P. K. Riggs*², *C. A. Gill*³, *A. D. Herring*³, *J. O. Sanders*³, *J. E. Sawyer*³, *R. K. Miller*², *and D. G. Riley*³, ¹*TEXAS A&M UNIVERSITY*, *COLLEGE STATION*, *TX*, ²*Texas A&M University*, *College Station*, *TX*, ³*Department of Animal Science*, Texas A&M University, College Station, TX

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1:45 PM

Longevity of Brahman, Angus, F₁ and F₂ Brahman-Angus cows.

J. K. Bohac^{*1}, J. O. Sanders², A. D. Herring², D. G. Riley³, and J. E. Sawyer⁴, ¹Texas A&M University, College Station, TX, ²Texas A&M University, Department of Animal Science, College Station, TX, ³Texas A&M AgriLife Research, College Station, TX, ⁴Texas AgriLife Research, College Station, TX

2:00 PM 5 **Relationships Between Prolactin Genotypes and** Beef Cow Profitability. L. R. Meyer^{*}, J. G. Powell, B. R. Kutz, K. S.

Anschutz, M. A. Sales, and C. F. Rosenkrans, Jr., Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR

2:15 PM

Break

2:30 PM

Age-related weights of second and third generation Nellore-Angus half-blood steers.

K. M. Sarlo¹, D. G. Riley², J. E. Sawyer³, C. A. Gill⁴, J. O. Sanders⁵, and A. D. Herring⁵, ¹Texas A&M, College Station, TX, ²Texas A&M AgriLife Research, College Station, TX, ³Texas AgriLife Research, College Station, TX, ⁴Texas A&M University, College Station, TX, ⁵Texas A&M University, Department of Animal Science, College Station, TX

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2:45 PM

Effects of breed type and sex on calf birth weight in reciprocal F2 Angus and Nellore Crosses. L. W. Bauer¹, J. O. Sanders², D. G. Riley², A. D. Herring³, and J. E. Sawyer³, ¹Texas A&M University, College Station, TX, ²Texas A&M University, Department of Animal Science, College Station, TX,

7

³Texas AgriLife Research, College Station, TX

Hot Carcass Weight and Longissimus Muscle Area in F and F Nellore-Angus Steers.

8

J. S. Delgadillo^{*}, D. G. Riley, C. A. Gill, J. O. Sanders, J. E. Sawyer, and A. D. Herring, Department of Animal Science, Texas A&M University, College Station, TX

3:15 PM

3:00 PM

Identification of regions of the bovine genome associated with gray coat color in a Nellore– Angus cross population.

q

Angus cross population. P. W. Holland⁻¹, C. A. Gill², A. D. Herring¹, J. O. Sanders¹, and D. G. Riley¹, ¹Texas A&M University, Department of Animal Science, College Station, TX, ²Texas A&M University, College Station, TX

3:30 PM 10 Effect of hair coat shedding on herd performance in crossbred beef cattle.

M. M. Foster^{*}, J. G. Powell, E. B. Kegley, B. R. Kutz, E. A. Backes, L. R. Meyer, B. P. Shoulders, and K. S. Anschutz, Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR

3:45 PM 11 Effect of hair shedding on reproductive performance in Angus females. *T. Smith^{*}*, *Mississippi State University*, *Mississippi State*, *MS*

Ruminant Animal Production I

Chair: Tyron A. Wickersham Texas A&M University Pecan

78

1:00 PM

Impact of breed and forage type on intake, performance, and residual feed intake of beef calves during the backgrounding period. D. Demeterco⁻¹, R. Walker², G. Scaglia³, and N. DiLorenzo⁴, ¹Louisiana State University, Baton Rouge, LA, ²LSU AgCenter, Homer, LA, ³LSU AgCenter, Jeanerette, LA, ⁴North Florida Research and Education Center, Marianna, FL

1:15 PM 79 Timing of growth implant insertion affects growth and humoral immune response of

preconditioning beef steers. *P. Moriel*^{*1}, *L. F. Artioli*¹, *M. Piccolo*¹, and *M. H. Poore*², ¹North Carolina State University, *Waynesville, NC,* ²North Carolina State University, *Raleigh, NC*

1:30 PM 80 Long-term effects of Pongamia seedcake as a protein supplement in cattle consuming forage. L. E. Bohlen¹, J. E. Sawyer², N. M. Early¹, L. A. Thompson¹, E. J. Von Edwins¹, L. A. Redmon¹, and T. A. Wickersham¹, ¹Texas A&M University, College Station, TX, ²Texas AgriLife Research, College Station, TX

1:45 PM 81 Feedlot performance of crossbred calves vaccinated with Salmonella Newport Extract vaccine.

R. C. Vann^{*1}, J. P. Banta², B. P. Littlejohn³, A. Snell², S. D. Lawhon⁴, R. D. Randel⁵, and T. H. Welsh, Jr.⁶, ¹MAFES - Brown Loam Experiment Station, Mississippi State University, Raymond, MS, ²Texas A&M AgriLife Extension, Overton, TX, ³Texas A&M University Department of Animal Science, College Station, TX, ⁴Department of Veterinary Pathobiology, Texas A&M University, College Station, TX, ⁵Texas A&M AgriLife Research- Overton, Overton, TX, ⁶Texas A&M University- Department of Animal Science, College Station, TX

2:00 PM 82 Methane and VFA Production Rates by in vitro Mixed Ruminal Microorganism Fermentations of Purified Carbohydrates and a Variety of N Sources. S. C. Klopatek, Texas A&M University, College

Station, TX

2:15 PM

Break

2:30 PM 83 Effect of breed type and backgrounding diet on stocker performance and carcass characteristics. *G. Scaglia*^{*1}, *R. Walker*², and *N. DiLorenzo*³, ¹*LSU AgCenter, Jeanerette, LA*, ²*LSU AgCenter, Homer, LA*, ³*University of Florida, Marianna, FL*

2:45 PM 84

Effects of monensin and dietary energy intake on maintenance requirements in beef cows. *C. J. Boardman, T. A. Wickersham, L. A. Trubenbach^{*}, and J. E. Sawyer, Texas A&M University, College Station, TX*

3:00 PM 85 Impact of breed and forage conservation method on apparent total tract nutrient digestibility in beef calves during the backgrounding period. *F. M. Ciriaco¹, D. D. Henry¹, D. Demeterco², R. Walker³, G. Scaglia⁴, G. C. Lamb¹, and N. DiLorenzo^{*1}, ¹University of Florida, North Florida Research and Education Center, Marianna, FL,* ²*Louisiana State University, Baton Rouge, LA, ³LSU AgCenter, Homer, LA, ⁴LSU AgCenter, Jeanerette, LA*

3:15 PM 86 Effects of monensin and dietary energy intake on diet utilization, VFA profile and ruminal fill in beef steers.

C. J. Boardman, T. A. Wickersham, L. A. Trubenbach^{*}, and J. E. Sawyer, Texas A&M University, College Station, TX

3:30 PM 87 Relationship of plasma osmolarity to feed efficiency in beef cattle. *T. D. Harrison and E. Felton, Division of Animal and*

Nutritional Sciences, West Virginia University, Morgantown, WV

3:45 PM 88 Evaluation of initial body weight and supplementation levels on health and performance of newly received stocker calves. W. C. Wilkins^{*}, B. B. Karisch, T. Smith, and D. R. Smith, Mississippi State University, Mississippi State, MS

4:00 PM 89 Effect of injectable castration regimen administered at branding on gain performance, testosterone production, and testicle atrophy in beef bull calves.

J. J. Ball^{*1}, J. G. Powell², P. Beck³, E. B. Kegley², J. K. Apple¹, and D. R. Cox⁴, ¹Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, AR, ²Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR, ³University of Arkansas SWREC, Hope, AR, ⁴Cowboy Animal Health, LLC, McKinney, TX

Meats

Chair: Ty E. Lawrence West Texas A&M University Maverick A

1:00 PM 49 Inclusion of post-extraction algal residue in finishing rations of beef steers: Trained sensory panel ratings for strip steaks. J. C. Morrill, J. E. Sawyer, J. R. Baber, S. B. Smith, R. K. Miller, and T. A. Wickersham, Texas A&M University, College Station, TX

1:15 PM 50 **Peracetic acid effects on shelf life and survival of E. coli on beef steaks.** *C. G. Davenport, L. Wang, and C. L. Bratcher*, *Auburn University, Auburn, AL*

1:30 PM 51 **Consumer Preference for Sirloin Steaks from Post-Extraction Algal Residue (PEAR) Fed Animals.** *M. D. Johnson^{*1}, R. K. Miller¹, J. Morrill¹, D. P.* Anderson¹ - *I. Consul²* - *I. Mirchem¹* - *I. Mirchem¹*

Anderson¹, J. E. Sawyer², T. A. Wickersham¹, J. W. Richardson¹, and M. A. Palma¹, ¹Texas A&M University, College Station, TX, ²Texas AgriLife Research, College Station, TX

1:45 PM

Break

Antimicrobial Resistance Symposium

Chair: Thomas H. Welsh, Jr. Texas A&M University Maverick A

1:55 PM Welcoming Remarks

2:00 PM 115 Antimicrobial resistance (AMR): Issues and solutions facing the livestock industry. H. M. Scott^{*}, Texas A&M University, College Station, TX

2:30 PM 116 **Methicillin-resistant** *Staphylococcus aureus* **(MRSA) in livestock production: An overview.** S. D. Lawhon', Department of Veterinary Pathobiology, Texas A&M University, College Station, TX

3:00 PM 117 **Probiotics as an alternative for antimicrobials and improving energy availability.** *J. R. Donaldson , Mississippi State University, Mississippi State, MS* 3:30 PM 118 **Phage applications in animal agriculture and food safety.** *J. J. Gill^{*}, Texas A&M University, College Station, TX*

4:00 PM Panel Discussion

Tuesday, February 9

Small Ruminant Production I

Chair: Travis R. Whitney Texas A&M AgriLife Research Medina

8:00 AM 97 Effect of a Mushroom (Coriolus versicolor) Based Probiotic on the expression of Toll-like receptors in Goat Neutrophils.

K. Ekwemalor^{*}, E. Asiamah, S. Adjei- Fremah, C. Huffman, H. Ismail, and M. Worku, North Carolina Agricultural and Technical State University, Greensboro, NC

8:15 AM 98 Effect of sire breed on gain, carcass characteristics and parasite resistance of Katahdin crossbred feedlot-finished lambs. S. A. Bowdridge^{*1}, C. S. Sotomaior², M. A. McCann³, A. M. Zajac³, and S. P. Greiner³, ¹West Virginia University, Morgantown, WV, ²Pontificia Universidad Catolica do Parana, Curitiba, Brazil, ³Virginia Polytechnic Institute and State University, Blacksburg, VA

8:30 AM 99 Effect of fish meal supplementation rate on parasitism and performance of grazing lambs. S. A. Bowdridge , D. Mata-Padrino, and D. P. Belesky, West Virginia University, Morgantown, WV

8:45 AM 100 The effects of mixed and sequential grazing on growth performances and parasitic resistances of kids.

S. Gebrelul[®], R. Marshall, Y. Ghebreiyessus, C. Adams, M. Berhane, and E. Runles, Southern University Ag. Center, Baton Rouge, LA

9:00 AM 101 Use of Agro-byproducts to Supplement Hair and Wool x Hair Crossbred Lambs Grazing Fescue Pasture: Growth and Gastrointestinal Parasites. S. Wildeus¹⁷, J. Lee², C. D. Teutsch³, and T. J. Nartea¹, ¹Virginia State University, Petersburg, VA, ²Fort Valley State University, Fort Valley, GA, ³Virginia Tech, Blackstone, VA

9:15 AM 102 Use of agro-byproducts to supplement hair and wool x hair crossbred lambs grazing fescue pasture: carcass characteristics. C. Tripp⁻¹, J. Lee¹, S. Wildeus², and B. B. Lemma¹, ¹Fort Valley State University, Fort Valley, GA, ²Virginia State University, Petersburg, VA

9:30 AM 103 Effects of Lespedeza cuneata and Pinus maritima condensed tannin extract on ovine Eimeria spp. development and infectivity. V. Kelly¹ and J. F. Miller² ¹ Jouisiana State

V. Kelly¹ and J. E. Miller², ¹Louisiana State University School of Veterinary Medicine, Baton Rouge, LA, ²Louisiana State University, Baton Rouge, LA

9:45 AM

Break

10:00 AM

Submitting higher-quality research publications: Selecting the appropriate research design and following JAS technical guidelines

*J. Burke¹, T. Whitney*², ¹USDA-ARS, Booneville, AR, ²Texas A&M AgriLife Research, College Station, TX

10:45 AM 104 Condensed Tannins-Induced Gene Expression in Meat Goats: A pilot study.

B. R. Min^{*1}, C. Wright¹, D. Perkins¹, M. Mienaltowski², A. Dawod³, N. K. Gurung¹, and T. H. Terrill⁴, ¹Tuskegee University, Tuskegee, AL, ²College of Agriculture and Environmental Sciences, University of California Davis, ca, CA, ³Faculty of Veterinary Medicine, University of Sadat City, Sadat, Egypt, ⁴Fort Valley State University, Fort Valley, GA

11:00 AM 105 The influence of breed and supplementation on consumer ratings of meat quality attributes of pasture-raised ground lamb meat. D. O'Brien^{*1}, S. Wildeus¹, T. J. Nartea¹, and J. Lee²,

¹Virginia State University, Petersburg, VA, ²Fort Valley State University, Fort Valley, GA

11:15 AM 106 Carcass and fatty acid profile of pen-fed and pasture-raised meat goat kids. S. Schoenian⁴, D. O'Brien², J. Semler³, D. Gordon⁴,

and M. B. Bennett⁵, ¹University of Maryland, Keedysville, MD, ²Virginia State University, Petersburg, VA, ³University of Maryland, Boonsboro, MD, ⁴University of Maryland, Derwood, MD, ⁵West Virginia University, Martinsburg, WV

11:30 AM 107 **Effect of semen extender and storage temperature on ram sperm motility over time.** *M. Acharya*^{*1}, *J. M. Burke*², *E. Smyth*², *A. Davis*³, *T. D. Lester*¹, and *R. W. Rorie*¹, ¹Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, AR, ²USDA-ARS,

Booneville, AR, ³Murray State University, Murray, KY

11:45 AM 108

Evaluation of terminal sire breeds for hair sheep production systems on lamb birth, weaning, and grazing performance.

A. R. Weaver^{*1}, D. L. Wright¹, M. A. McCann¹, A. M. Zajac¹, S. A. Bowdridge², and S. P. Greiner¹, ¹Virginia Polytechnic Institute and State University, Blacksburg, VA, ²West Virginia University, Morgantown, WV

Management Strategies for Intensive, Sustainable Cow-Calf Production Systems in the Southeastern US Symposium - Extension

Chair: Dave Hutcheson, Animal-Agriculture Consulting Pecan

8:00 AM 126 Early weaning beef calves from first-calf Bos indicus-influenced cows. J. D. Arthington and J. M. B. Vendramini, UF/IFAS,

Range Cattle Research and Education Center, Ona, FL

8:30 AM 127 Potential for more intensive Cow-Calf production in the Southeast Region. *M. H. Poore* and *D. H. Poole, North Carolina State*

University, Raleigh, NC

Extension I

Chair: Michael S. Gadberry University of Arkansas Pecan

9:00 AM 12 Evaluation of Antibiotic Metaphylactic Therapy for Receiving Calves at Risk for Bovine Respiratory Disease.

J. Hawley¹, J. G. Powell^{*2}, E. B. Kegley², P. A. Beck³, J. L. Reynolds², and J. A. Hornsby², ¹Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, AR, ²Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR, ³University of Arkansas SWREC, Hope, AR

9:15 AM 13 Form of Se in free-choice mineral mix tends to affect individual ad libitum intake by grazing beef cows and affects cow and suckling calf blood Se levels.

*W. R. Burris^{*1}, B. Knight¹, J. D. Patterson², and J. C. Matthews², ¹University of Kentucky, Princeton, KY, ²University of Kentucky, Lexington, KY*

9:30 AM 14 Development, implementation and evaluation of an artificial insemination certification course. J. D. Rhinehart^{*} and K. W. Thompson, University of Tennessee, Spring Hill, TN

9:45 AM Break

10:00 AM 15 **The Economics of Herd Expansion.** *C. G. Prevatt^{*}, University of Florida, Ona, FL*

10:15 AM 16 Impacts of Western North Carolina Grazing Clinics on Producer Pasture Management. A. M. Schaller, United States Department of Agriculture Natural Resources Conservation Service, Raleigh, NC

10:30 AM 17 Comparing post test scores for an animal handling and control workshop conducted two consecutive years.

M. R. Russell^{*}, University of Arkansas, Little Rock, AR

10:45 AM18Cooperative Extension Programming for DiverseClientele in the Virginia Swine Industry.

M. Estienne^{*1}, C. Wood², A. Fabi², J. Wiegert³, C. Childs⁴, C. Gregg⁵, J. Hilleary⁶, and T. Mize⁷, ¹Virginia Tech Tidewater AREC, Suffolk, VA, ²Virginia Tech, Blacksburg, VA, ³North Carolina State University, Raleigh, NC, ⁴Virginia Cooperative Extension, Front Royal, VA, ⁵Virginia Cooperative Extension, Dinwiddie, VA, ⁶Virginia Cooperative Extension, Leesburg, VA, ⁷Virginia Cooperative Extension, Warrenton, VA

11:00 AM 19 Improving Enterprise Outcomes and Increasing Minority Participation within the Meat Goat Industry through Outreach Activities in the Southeast.

M. L. Browning^{*1}, T. Cook², and R. Browning, Jr.³, ¹Alabama A&M University, Huntsville, AL, ²MS Meat Goat Producers Cooperative, Terry, MS, ³Tennessee State University, Nashville, TN

20

11:15 AM

Southern Section Extension Forum: Strengthening Extension programs across the Southeast.

B. B. Karisch^{*1}, M. S. Gadberry², M. K. Mullenix³, B. M. Nichols⁴, C. M. Holland³, D. L. Fernandez⁵, D. Hancock⁶, and J. M. B. Vendramini⁷, ¹Mississippi State University, Mississippi State, MS, ²Department of Animal Science, University of Arkansas, Little Rock, AR, ³Auburn University, Auburn, AL, ⁴Noble Foundation, Ardmore, OK, ⁵University of Arkansas -Pine Bluff, Pine Bluff, AR, ⁶University of Georgia, Athens, GA, ⁷UF/IFAS, Range Cattle Research and Education Center, Ona, FL

Pastures and Forages

Chair: John G. Andrae Clemson University Llano/Pecos

52

Effects of stocking rate, forage management, and grazing management on performance and economics of cow-calf production in Southwest Arkansas.

P. Beck^{*1}, B. Stewart¹, M. Sims¹, and J. Jennings², ¹University of Arkansas SWREC, Hope, AR, ²Department of Animal Science, University of Arkansas, Little Rock, AR

9:15 AM

9:00 AM

Supplementation Levels and Monensin Effects on Performance of Early Weaned Calves Grazing Bahiagrass Pastures.

53

J. M. B. Vendramini¹, V. C. Gomes², F. A. Kuhawara³, R. F. Cooke⁴, and J. M. D. Sanchez⁵, ¹UF/IFAS, Range Cattle Research and Education Center, Ona, FL, ²Sao Paulo State University, Dracena, Brazil, ³Sao Paulo State University, Botucatu, Brazil, ⁴Oregon State University - EOARC Burns, Burns, OR, ⁵UF/IFAS Range Cattle Research and Education Center, Ona, FL

9:30 AM 54 In Situ Degradation Parameters of Three Chronological Maturities of 'Tifton 85' Bermudagrass from Cattle Supplemented with Varying Levels of Distillers' Dried Grains. W. B. Smith^{*1}, J. L. Foster², K. C. McCuistion³, S. J. Abatti³, M. Lesak³, and F. M. Rouquette¹, ¹Texas A&M AgriLife Research, Overton, TX, ²Texas A&M AgriLife Research, Beeville, TX, ³Texas A&M University - Kingsville, Kingsville, TX

9:45 AM

Break

10:00 AM 55 Effect of fermented corn silage density and bacterial inoculants on corn silage pH and fermentation end products. *W. L. Braman^{*}, J. E. Kurtz, and K. A. Bryan, Chr.* Hansen Animal Health and Nutrition, Milwaukee, WI

10:15 AM 56 **Stocker cattle performance from grazed stockpiled 'Tifton 85' bermudagrass.** *K. R. Bivens^{*1}, M. K. Mullenix¹, J. M. Johnson¹, B. E. Gamble², and R. B. Muntifering¹, ¹Auburn University, Auburn, AL, ²Wiregrass Research and Extension Center, Headland, AL*

10:30 AM 57 Effects of bambermycin or monensin on performance of growing steers grazing wheat pasture.

W. L. Galyen^{*1}, P. Beck², E. B. Kegley³, J. G. Powell³, M. S. Gadberry⁴, T. Hess⁵, and D. S. Hubbell, III⁵, ¹Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, AR, ²University of Arkansas SWREC, Hope, AR, ³Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR, ⁴Department of Animal Science, University of Arkansas, Little Rock, AR, ⁵University of Arkansas Livestock and Forestry Research Station, Batesville, AR

10:45 AM58Virginia wildrye as an alternative to annualryegrass and wheat for grazing stocker beefsteers.

J. A. Parish^{*}, T. F. Best, and C. O. Stewart, Mississippi State University, Prairie, MS

11:00 AM 59 Distiller's grains as a substitute for fertilizer in summer grazing systems: performance, nitrogen recovery, and profit. *R. Reuter*¹, *P. A. Lancaster*², *G. W. Horn*¹, *B. D.*

R. Reuter ', *P. A. Lancaster*², *G. W. Horn*', *B. D.* Wallis¹, and *P. A. Gunter*¹, ¹Oklahoma Agricultural Experiment Station, Stillwater, OK, ²UF/IFAS Range Cattle Research and Education Center, Ona, FL

Physiology I

Chair: Rhonda C. Vann Mississippi State University Regency East Ballroom #3

9:00 AM 60 **Ergot alkaloid induced vasoconstriction of bovine uterine and ovarian blood vessels.** *D. H. Poole*^{*}, *S. E. Lyons, J. C. Mackey, A. M. Tyson, G. Shaeffer, and M. H. Poore, North Carolina State University, Raleigh, NC*

9:15 AM 61 Sexually dimorphic innate immune responses but not tissue Salmonella translocation patterns in pigs exposed to an oral Salmonella challenge. N. C. Burdick Sanchez^{*1}, P. R. Broadway¹, J. A. Carroll¹, E. V. Gart², L. K. Bryan², and S. D. Lawhon², ¹USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, ²Department of Veterinary Pathobiology, Texas A&M University, College Station, TX

9:30 AM 62 Influence of sex and temperament on response of Brahman calves to Salmonella Newport Extract vaccine.

A. Snell^{1,2,3}, J. P. Banta³, T. H. Welsh, Jr.¹, R. D. Randel⁴, S. D. Lawhon⁵, and R. C. Vann⁶, ¹Department of Animal Science, Texas A&M University, College Station, TX, ²Texas A&M AgriLife Research, Overton, TX, ³Texas A&M AgriLife Extension, Overton, TX, ⁴Texas A&M AgriLife Research- Overton, Overton, TX, ⁵Department of Veterinary Pathobiology, Texas A&M University, College Station, TX, ⁶MAFES - Brown Loam Experiment Station, Mississippi State University, Raymond, MS

9:45 AM

Break

10:00 AM 63 Effects of energy intake during the breeding season on beef heifer performance, endocrine profiles, and oocyte transcript levels synchronized for artificial insemination.

R. Walker^{*1}, G. T. Gentry², G. Scaglia³, and K. Bondioli⁴, ¹LSU AgCenter, Homer, LA, ²LSU AgCenter Dean Lee Research Station, Alexandria, LA, ³LSU AgCenter, Jeanerette, LA, ⁴Louisiana State University School of Animal Sciences, Baton Rouge, LA

10:15 AM64Effect of monensin supplementation on Brahman
cow performance and postpartum follicular
development.

A. Snell^{1,2,3}, T. H. Welsh, Jr.¹, R. D. Randel⁴, R. C. Vann⁵, G. D. Hufstedler⁶, J. P. Banta³, and D. A. Neuendorff², ¹Department of Animal Science, Texas A&M University, College Station, TX, ²Texas A&M AgriLife Research, Overton, TX, ³Texas A&M AgriLife Extension, Overton, TX, ⁴Texas A&M AgriLife Research- Overton, Overton, TX, ⁵MAFES - Brown Loam Experiment Station, Mississippi State University, Raymond, MS, ⁶Elanco Animal Health, Greenfield, IN

10:30 AM 65 Ergot alkaloid inhibition of cytochrome P450 activity. P. Dias Morse^{*1} S. A. Alresbedi¹ and C. F.

P. Dias Morse^{*1}, *S. A. Alrashedi*¹, and *C. F. Rosenkrans, Jr.*², ¹University of Arkansas, Fayetteville, AR, ²Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR

10:45 AM 66

Influence of prenatal stress on insulin response to a glucose challenge in yearling Brahman bulls. *R. A. d'Orey Branco^{1,2}, D. A. Neuendorff², S. E.* Schmidt¹, N. C. Burdick Sanchez³, J. A. Carroll³, T. *H. Welsh, Jr.¹, and R. D. Randel⁴, ¹Department of Animal Science, Texas A&M University, College Station, TX, ²Texas A&M AgriLife Research, Overton, TX, ³USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, ⁴Texas A&M AgriLife Research-Overton, Overton, TX*

11:00 AM 67 Effect of trace mineral source on postweaning Bos Taurus beef bull sexual development. D. M. Price^{*1}, K. M. Havill¹, S. R. Hayter¹, L. J. Sims¹, D. O. Rae², D. M. Irsik², L. J. Spicer³, M. J. Hersom¹, and J. V. Yelich¹, ¹University of Florida, Gainesville, FL, ²College of Veterinary Medicine University of Florida, Gainesville, FL, ³Oklahoma State University, Stillwater, OK

11:15 AM 68 Utilization of resynchronization as a strategy to increase the percentage of replacement beef heifers conceiving to artificial insemination (AI) after an initial fixed-time AI (TAI).

P. L. P. Fontes^{*1}, *N. Oosthuizen*¹, *V. R. G. Mercadante*², *G. V. de Moraes*³, *D. D. Henry*⁴, *F. M. Ciriaco*⁴, *N. DiLorenzo*¹, and *G. C. Lamb*¹, ¹University of Florida, Marianna, FL, ²Virginia Polytechnic Institute and State University, Blacksburg, VA, ³State University of Maringa, Maringa, Brazil, ⁴University of Florida, North Florida Research and Education Center, Marianna, FL

11:30 AM 69 Yeast probiotic supplementation mitigates some of the negative effects of heat stress in feedlot heifers.

P. R. Broadway^{*1}, J. A. Carroll¹, N. C. Burdick Sanchez¹, S. L. Roberts², K. P. Sharon³, J. T. Richeson², and J. R. Corley⁴, ¹USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, ²Department of Agricultural Sciences, West Texas A&M University, Canyon, TX, ³Texas Tech University, Department of Animal and Food Sciences, Lubbock, TX, ⁴Phileo Lesaffre Animal Care, Cedar Rapids, IA

11:45 AM 70 **The influence of age at first calving on productivity of Brahman females.** *R. A. d'Orey Branco^{*1,2}, D. A. Neuendorff¹, W. B. Smith¹, T. H. Welsh, Jr.², and R. D. Randel³, ¹Texas A&M AgriLife Research, Overton, TX, ²Department of Animal Science, Texas A&M University, College Station, TX, ³Texas A&M AgriLife Research- Overton, Overton, TX*

Ruminant Animal Production II

Chair: Tyron A. Wickersham Texas A&M University Bowie C

> 90 fied Hay Feed

Effects of Se-fortified Hay Feeding During the Periparturient Period on Measures of Se Status in Cows and Calves.

J. Ranches^{*}, J. M. B. Vendramini, and J. D. Arthington, UF/IFAS, Range Cattle Research and Education Center, Ona, FL

9:15 AM 91 Effects of dietary energy concentration and intake on ruminal pH during various phases of adaptation.

L. A. Trubenbach^{*1}, T. A. Wickersham¹, C. J. Boardman¹, and J. E. Sawyer², ¹Texas A&M University, College Station, TX, ²Texas AgriLife Research, College Station, TX

9:30 AM 92 Polymorphisms in Stress-Related Genes Affect Body Weights of Angus-Based Crossbred Cows at Weaning.

M. A. Sales^{*}, L. R. Meyer, J. G. Powell, K. S. Anschutz, B. R. Kutz, and C. F. Rosenkrans, Jr., Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR

9:45 AM

9:00 AM

Break

10:00 AM 93 Effect of trace mineral (TM) source on postweaning Bos Taurus bull growth, performance and liver mineral status. D. M. Price^{*1}, K. M. Havill¹, S. R. Hayter¹, L. J. Sims¹, R. West¹, D. O. Rae², D. M. Irsik², L. J. Spicer³, M. J. Hersom¹, and J. V. Yelich¹, ¹University of Florida, Gainesville, FL, ²College of Veterinary Medicine University of Florida, Gainesville, FL, ³Oklahoma State University, Stillwater, OK

10:15 AM 94 Comparison of Organic and Inorganic Trace Minerals Supplementation Strategies for Beef Heifers.

*R. H. Burnett^{*1}, E. B. Kegley², J. C. Moore¹, J. G. Powell², R. W. Rorie², and C. K. Larson³, ¹Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, AR, ²Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR, ³Zinpro Corporation, Eden Prairie, MN*

10:30 AM 95 Metabolomic profiling for identification of biomarkers associated with temperament in feedlot cattle. *M. D. Miller^{*}, Texas A&M University, College Statio*

M. D. Miller^{*}, Texas A&M University, College Station, TX 10:45 AM 96

Effects of Rotating Antibiotic and Ionophore Feed Additives on Enteric Methane, Volatile Fatty Acid Production and Rumen Microbial Populations of Steers Consuming a High Forage Diet. W. L. Crossland, Texas A&M University, College Station. TX

Management Strategies for Intensive, Sustainable Cow-Calf Production Systems in the Southeastern US Symposium – Ruminant Animal Production

Chair: Dave Hutcheson, Animal-Agriculture Consulting Bowie C

11:00 AM 128 Bermudagrass Pastures Overseeded with Cool-Season Annual Grasses and Clovers. F. M. Rouquette^{*}, Texas A&M AgriLife Research, Overton, TX

11:30 AM 129 Matching forage systems with cow size and environment for Sustainable Cow-Calf production in the southern region.

P. Beck^{*1}, *M.* S. Gadberry², S. A. Gunter³, and J. Jennings², ¹University of Arkansas, Hope, AR, ²Department of Animal Science, University of Arkansas, Little Rock, AR, ³USDA-ARS, Woodward, OK

11:55 AM Panel Discussion

> Small Ruminant Production II Chair: Travis R. Whitney Texas A&M AgriLife Research

Medina

1:00 PM 109 Effect of sire breed on pregnancy rate in landrace hair sheep during summer Mating. S. Wildeus^{*} and D. O'Brien, Virginia State University, Petersburg, VA

1:15 PM 110 Use of fecal NIRS to predict red cedar intake by goats. S. P. Hart^{*} and M. Sawalhah, Langston University, Langston, OK

1:30 PM 111 Effects of dietary AcidBuf supplementation with different levels of salt on productive performance and carcass characteristics of growing lambs. I. A. Alhidary['], M. M. Abdelrahman, and G. M. Suliman, King Saud University, Riyadh, Saudi Arabia 1:45 PM

Break

2:00 PM 112 Effect of nutritional supplementation and gonadotropin stimulation on fertility of early

postpartum lactating ewes. A. Adebiyi, A. K. Redhead, C. D. Paul, E. Greenleaf, D. Singh-knights, and M. Knights, West Virginia University, Morgantown, WV

2:15 PM 113 Quantification of mRNA Expression for the Estrogen-Regulated Gene ISYNA1 in the Goat Testis.

E. Richardson^{*}, Tuskegee University, Tuskegee, AL

2:30 PM 114 Blood profiles of kids in mixed and sequential grazing experiment. S. Gebrelul, R. Marshall^{*}, M. Morgan, C. Adams, and

Y. Ghebreiyessus, Southern University Ag. Center, Baton Rouge, LA

Extension II

Chair: Michael S. Gadberry University of Arkansas Rio Grande Ballroom - East

2:00 PM

Assessment of a Beef Cattle Management Website for Extending the Reach of Extension Information in Alabama.

M. K. Mullenix, E. M. Forte, and K. M. Bennett, Auburn University, Auburn, AL

2:15 PM 22 **Beef Cattle Programming Across State Lines: The 7th Annual Deep South Stocker Conference.** *E. M. Forte^{*1}, M. K. Mullenix¹, R. L. Stewart, Jr.², and B. B. Karisch³, ¹Auburn University, Auburn, AL,* ²University of Georgia, Athens, GA, ³Mississippi State University, Mississippi State, MS

2:30 PM 23

Beef ambassador programming: A case for coming alongside the beef community to develop agvocacy and leadership skills in youth. D. Mulvaney^{*1,2}, W. Greene^{1,2}, W. Powell³, E. Bates⁴, and B. Smith⁵, ¹Auburn University, Auburn, AL, ²Dept. Animal Sciences, Auburn, AL, ³Alabama Cattlemen's Association, Montgomery, AL, ⁴Alabama Cattlewomen's Association, Cullman, AL, ⁵Lauderdale County Cattlemen's Association, Green Hill. AL

2:45 PM 24 North Carolina Women Cattle Producers' Educational Needs and Sources of Information. A. D. Shaeffer, M. J. Kistler, M. H. Poore, J. Bruce, and K. S. U. Jayaratne, North Carolina State

University, Raleigh, NC 3:00 PM 25

NC Cattle Industry Assessment Program. M. H. Poore^{*1}, A. D. Shaeffer¹, and B. Blinson², ¹North Carolina State University, Raleigh, NC, ²NC Cattlemen's Association, Fuquay-Varina, NC

Physiology II

Chair: Chair: Rhonda C. Vann Mississippi State University Bowie C

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1:00 PM

Comparison of plasma and hair cortisol concentrations in hair sheep ewes and lambs in response to weaning with or without fence line contact.

R. W. Godfrey^{*1}, J. A. Ruggiero¹, S. A. Lakos¹, S. A. Lockwood², and H. G. Kattesh², ¹Agricultural Experiment Station, University of the Virgin Islands, St Croix, US Virgin Islands, ²Dept. of Animal Science, University of Tennessee, Knoxville, TN

1:15 PM

A probiotic bolus is ineffective in reducing Salmonella shedding in orally-inoculated weaned pigs.

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P. R. Broadway^{*1}, J. A. Carroll¹, N. C. Burdick Sanchez¹, E. V. Gart², L. K. Bryan², and S. D. Lawhon², ¹USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, ²Department of Veterinary Pathobiology, Texas A&M University, College Station, TX

1:30 PM 73 Effect of timing of local anesthesia on physiological responses in calves after dehorning.

A. J. Mathias^{*1}, C. C. Williams¹, M. G. Welborn², C. B. Navarre¹, J. F. Coetzee³, R. M. Orellana¹, and S. J. Blair¹, ¹Louisiana State University, Baton Rouge, LA, ²LSU School of Veterinary Medicine, Baton Rouge, LA, ³Pharmacology Analytical Support Team, Iowa State University College of Veterinary Medicine, Ames, IA

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1:45 PM

Cytochrome P450 Polymorphisms Influence Growth and Immune Function of Dairy Heifers Grazing Stockpiled Endophyte-Infected Tall Fescue.

M. A. Sales^{*1}, *L. R. Meyer²*, and C. F. Rosenkrans, Jr.¹, ¹Department of Animal Science, Division of Agriculture, University of Arkansas, Fayetteville, AR, ²University of Arkansas, Fayetteville, AR 2:00 PM 75 Development of an equine non-contact thermography device: Relationship of ocular and rectal temperatures to indicators of health status in horses.

H. C. Collins^{*1,2}, J. L. Leatherwood¹, M. J. Anderson¹, M. M. Beverly¹, F. Yildiz¹, N. L. Walker³, and K. J. Stutts¹, ¹Sam Houston State University, Huntsville, TX, ²Texas A&M University, College Station, TX, ³Louisiana State University Agricultural Center, Baton Rouge, LA

2:15 PM 76 Modulation of the acute phase response following a lipopolysaccharide challenge in pigs supplemented with an all-natural Saccharamyces cerevisiae fermentation product.

J. A. Carroll[†], N. C. Burdick Sanchez¹, P. R. Broadway¹, B. E. Bass², and J. W. Frank², ¹USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, ²Diamond V, Cedar Rapids, IA

2:30 PM 77 Hair Coat Phenotype in Heifers Alters Physiological Responsiveness to Ergot Alkaloids Commonly Found in Endophyte-Infected Tall Fescue.

T. L. Devine^{*}, J. C. Mackey, G. Shaeffer, M. H. Poore, and D. H. Poole, North Carolina State University, Raleigh, NC