SOUTHERN SECTION

American Society of Animal Science

ANNUAL MEETING

February 4–7, 2012
Birmingham, Alabama

In conjunction with the 109th Annual Convention of the Southern Association of Agricultural Scientists

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Greenfield, IN

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Young Animal Scientist – Education

Undergraduate Paper Competition

Graduate Student Awards
Competition
PROGRAM EVENTS

**Friday, February 3**
Academic Quadrathlon (AQ)
9:00 PM Advisors Meeting
Holiday Inn Express
Auburn, AL

**Saturday, February 4**
AQ Lab Practicum and Written Exam
Auburn University
Auburn, AL

**Sunday, February 5**
AQ Oral Preparation
6:30 AM–noon
BJCC (3rd Floor)
East Meeting Rooms G, H, I, J

AQ Oral Presentation
8:00 AM–noon
BJCC (3rd Floor)
East Meeting Room L

AQ Quiz Bowl
8:00 AM–1:00 PM
BJCC (3rd Floor)
East Meeting Room O

AQ Quiz Bowl Championship/Awards and Awards Program
8:00 AM–4:00 PM
BJCC (3rd Floor)
East Meeting Room N

SCC 81: Sustainable Small Ruminant Production IEG
8:30 AM–4:00 PM
BJCC (3rd Floor)
East Meeting Room K

Registration
11:00 AM–4:00 PM
BJCC (3rd Floor)
Registration Room

SCC 72: Enhancing Reproductive Efficiency in Cattle IEG
1:00 PM–4:00 PM
BJCC (3rd Floor)
East Meeting Room O

SERA 41: Beef Cattle Production Using Forages in the Southeast
1:00 PM–4:00 PM
BJCC (3rd Floor)
East Meeting Room G

SAAS Board Meeting
2:30 PM–3:30 PM
MFCC (2nd Floor)
Auditorium

SAAS General Session/Business Meeting
4:00 PM–6:00 PM
MFCC (2nd Floor)
Auditorium

Distinguished Panel Discuss on 50 Years after Birmingham: Reflections on the Changes in the Conditions of People Especially in Rural Alabama

6:00–till
SAAS Reception

SS-ASAS Advisory Committee and Executive Committee
6:00 PM–8:00 PM
Sheraton Birmingham Hotel
Jefferson Boardroom 2

SAAS Reception/Super Bowl Party
6:00 PM–10:00 PM
(Old Car Haven – Off Site) Super Bowl Reception (continues buses to run from hotel to Old Car Heaven) Jambalaya to be cooked by Jambalaya Champion Byron Gautreau.

Monday, February 6

*Interested in taking the ARPAS exam at the ASAS Southern Section meeting? Contact ARPAS at arpas@assochq.org for information or to schedule an exam.*

Registration
7:30 AM–4:00 PM
BJCC (3rd Floor)
Registration Room

SS-ASAS Coffee Break
9:30 AM–10:30 AM
SS-ASAS Business Meeting and Awards Ceremony  
5:00 PM–7:00 PM  
BJCC (3rd Floor)  
East Meeting Room N

Small Ruminant Subcommittee of the NAGP  
7:00 PM–9:15 PM  
BJCC (3rd Floor)  
East Meeting Room O

**Tuesday, February 7**  
SAAS Board Breakfast Meeting  
7:00 AM–10:00 AM  
BJCC  
Hall of Fame Board Room

Registration  
8:00 AM–noon  
BJCC (3rd Floor)  
Registration Room

Graduate Student Luncheon  
noon–2:00 PM  
BJCC (3rd Floor)  
East Meeting Room H

Extension Luncheon  
noon–2:00 PM  
BJCC (3rd Floor)  
VIP Room
SYMPOSIA AND ORAL SESSIONS

Monday, February 6

SYMPOSIA AND ORAL SESSIONS

Opportunities for Stocker Cattle in the Southern U.S.

Chair: Justin Rhinehart, University of Tennessee
BJCC (3rd Floor) East Meeting Room K

8:00 AM  Introduction.
J. D. Rhinehart, University of Tennessee.

8:15 AM  Economics of the stocker business compared to cow/calf. What are the opportunities for getting into the cattle business?
R. C. Lacy, University of Georgia.

8:55 AM  Physiology of the receiving calf. Nutritional and health management.
C. R. Krehbiel, Oklahoma State University.

9:35 AM  Break

9:55 AM  Forage and co-product systems for stockers in the South. Have fundamental shifts in markets changed the optimal system?
D. L. Rankins, Auburn University.

10:35 AM  Impact of stocker program on feedlot performance and carcass quality.
R. R. Reuter, Noble Foundation.

Undergraduate Student Competition

Chair: Brian Rude, Mississippi State University
BJCC (3rd Floor) East Meeting Room L

8:15 AM  1  Residual feed intake and meat quality in Angus-sired cattle.
8:30 AM  2
Lean beef trim improved fresh and cooked quality characteristics of ground beef patties.

8:45 AM  3
Color development and stability in the beef longissimus thoracis (LT) and psoas major (PM).

9:00 AM  4
Regulation of marbling in heifers in response to age and pasture versus grain finishing.

9:15 AM  5
The use of real-time ultrasound and predictive software to estimate carcass yield and quality of fed cattle.
K. J. Kelly¹, B. C. Williamson¹, R. S. Miculinich¹, C. Hunt², and T. J. Wistuba³, ¹Morehead State University, Morehead, KY, ²Paradox Farms, Ewing, KY, ³Novus International, Inc., St. Charles, MO.

9:30 AM  6
The effect of pyruvate dehydrogenase E1-α subunit (PDHA1) on fresh pork quality.
M. L. Penick¹, R. E. Miculinich¹, B. C. Williamson¹, and S. J. Moeller², ¹Morehead State University, Morehead, KY, ²Ohio State University, Columbus.

9:45 AM  Break

10:00 AM  7
Annual ryegrass (Lolium multiflorum Lam.) production and quality as influenced by planting date and irrigation during early seedling development.
W. B. Smith*, R. B. Muntifering, E. van Santen, E. A. Guertal, and D. M. Ball, Auburn University, Auburn, AL.

10:15 AM  8
Determining the relationship between body temperature and hair shedding scores in Angus cows.
M. R. Woolfolk*, J. J. Mayer, J. D. Davis, and T. Smith, Mississippi State University, Starkville.

10:30 AM  9
Effect of dam temperament on birth weight in Brahman cattle.
A. B. Keith¹,², A. W. Lewis¹, D. A. Neuendorff¹, R. C. Vann³, T. H. Welsh², and R. D. Randel¹, ¹Texas AgriLife Research, Overton, ²Texas AgriLife.
10:45 AM  10
Impact of different handling styles (good vs. adverse) on growth performance, behavior, and cortisol concentrations in beef cattle.

11:00 AM  11
Determination and correlation of internal and external scrotal temperature in stallions.
A. L. Perrin*, C. A. Cavinder, and D. D. Varner, Texas A&M University, College Station.

11:15 AM  12
Growth, intake and feed efficiency in hair sheep lambs fed a hay-based diet with increasing levels of soyhull inclusion.
S. D. Szabo*1, S. Wildeus1, and C. D. Teutsch2, 1Virginia State University, Petersburg, 2Virginia Tech, Blackstone.

11:30 AM  13
Evaluating the effect of TASCO-14 on gastrointestinal nematodes in small ruminants.
T. E. Lutz*1, F. N. Mhlanga2, E. Pierce1, and J. Howard1, 1Abilene Christian University, Abilene, TX, 2Lipscomb University, Nashville, TN.

Graduate Student Competition I

Chair: Debra Aaron, University of Kentucky
BJCC (3rd Floor) East Meeting Room N

9:00 AM  14
Effect of pre-finishing implant strategy and nutrient restriction on finishing performance.
J. Robinette*1,2, R. Reuter*, P. Beck3, F. Ribeiro3, B. Stewart3, H. Gray3, and J. Apple3, 1University of Arkansas, Fayetteville, 2The Samuel Roberts Noble Foundation, Ardmore, OK, 3University of Arkansas-Southwest Research and Extension Center, Hope, 4Texas A&M University, Department of Agricultural Sciences, Commerce.

9:15 AM  15
Effects of mature size on intake, calf weight, and milk yield in a spring-calving commercial cow/calf operation.
G. L. Mourer*, C. P. McMurphy, A. J. Sexten, C. D. Dobbs, S. K. Linneen, J. D. Sparks, and D. L. Lalman, Oklahoma State University, Stillwater.

9:30 AM  16
Effects of respiratory vaccination timing and zeranol growth implant on health, performance, and immunity of newly received stocker calves.
K. D. Poe*, P. A. Beck, J. T. Richeson, T. W. Hess,
D. S. Hubbell, J. G. Powell, and D. L. Kreider,
University of Arkansas, Fayetteville.

9:45 AM  17
**Effects of creep feeding supplementation on performance of cows and calves grazing limpograss pastures in Florida.**
A. D. Aguiar*, J. M. B. Vendramini¹, J. D. Arthington¹, L. E. Sollenberger², J. M. Bennet², M. Hersom², A. Valente¹, and P. Salvo³, ¹Range Cattle Research Education Center, Ona, Florida, US, ²University of Florida, Gainesville.

10:00 AM  18  **Growth and carcass characteristics of pigs fed plum juice concentrate as a feed additive.**

10:15 AM  **Break**

10:30 AM  19  **Effects of stocker phase grazing system and implantation on performance and carcass characteristics of fall born steers.**
C. P. McMurphy, G. L. Maurer, S. K. Linneen*, B. P. Holland, G. W. Horn, and D. L. Lalman, Oklahoma State University, Stillwater.

10:45 AM  20  **Carcass and growth characteristics of grain and forage finished cattle with varying body types.**

11:00 AM  21  **The impact of swine management operations on large airway morphology of pigs.**

11:15 AM  22  **Evaluation of different methods of cattle hip height data collection.**
M. L. Marks*, J. A. Parish, B. M. Bourg, N. B. Simmons, and T. Smith, Mississippi State University, Mississippi State.
Breeding and Genetics

Chair: Mauricio Elzo, University of Florida
BJCC (3rd Floor) East Meeting Room K

1:00 PM  23
**Genetic parameter estimates for susceptibility/resistance to infectious bovine keratoconjunctivitis (IBK) in Angus calves.**

1:15 PM  24
**Relationship of horn fly infestation to polymorphisms in heat shock protein 70 gene in beef cows.**

1:30 PM  25
**Comparison of pork quality characteristics among Hereford, Tamworth and Large Black crossbred pigs raised in a hoop barn during the finishing phase.**
S.-H. Oh*, D. Bautista, D. Hanson, N. Whitley, M. Morrow, and M. T. See, North Carolina A&T State University, Greensboro, North Carolina State University, Raleigh.

1:45 PM  26
**Growth of Berkshire crossbreds sired by Tamworth and Large Black.**
S.-H. Oh*, M. Morrow, and T. See, North Carolina A&T State University, Greensboro, NC, North Carolina State University, Raleigh, NC.

2:00 PM  27
**Relationship of underline score with growth, carcass and maternal traits in Beefmaster cattle.**

2:15 PM  28
**Selection for small frame size of Angus cattle in Alabama. 1. Growth rate, weight gain, hip height of calves and cow efficiency.**
Selection for small frame size of Angus cattle in Alabama. 2. Phenotypic correlations and growth pattern of replacement heifers.
K. Nadarajah¹, D. L. Kuhlers¹, G. L. Thompson²,³, B. E. Norris³, H. D. Harkins³, and L. Kniese-Anderson¹,¹
¹Department of Animal Sciences, Auburn University, Auburn, AL, ²Alabama Cooperative Extension System, Auburn, ³Tennessee Valley Research and Extension Center, Belle Mina, AL.

Breed group effects for chute exit velocity as an indicator trait for temperament in weaner cattle.
M. L. Thomas*,¹ A. H. Brown¹, Z. B. Johnson¹, S. W. Coleman², M. A. Elzo³, S. M. DeRouen², D. E. Franke³, W. E. Wyatt³, R. C. Vann³, G. R. Hansen³, and D. G. Riley³,¹ University of Arkansas Division of Agriculture, Fayetteville, ²USDA/ARS, Brooksville, FL, ³University of Florida, Marianna, ⁴Louisiana State University AgCenter, Homer, ⁵Louisiana State University AgCenter, Baton Rouge, ⁶Louisiana State University AgCenter, Iberia, ⁷Mississippi State University, Raymond, ⁸North Carolina State University, Plymouth, ⁹Texas A&M University, AgriLife, College Station.

Relationship of temperament scores and prolactin promoter polymorphisms in purebred Angus calves.

QTL identification for udder traits in Bos indicus-Bos taurus cows using Bayesian inference.
M. E. Williams*,¹ L. L. Hulsman, A. J. Cooper, J. O. Sanders, A. D. Herring, C. A. Gill, and D. G. Riley, Department of Animal Science, Texas A&M University, College Station.

Comparison of genes associated with beef sensory characteristics in a Nellore-Angus population utilizing two association methods.
L. L. Hulsman*,¹ M. R. S. Fortes², A. Reverter², R. K. Miller¹, J. O. Sanders¹, A. D. Herring¹, C. A. Gill¹, and D. G. Riley¹,¹ Department of Animal Science, Texas A&M University, College Station, ²CSIRO Livestock Industries, Queensland Bioscience Precinct, Brisbane, Australia.

Influence of residual average daily gain or residual feed intake on birth weight in Brahman cattle.
A. B. Keith*,¹,² A. W. Lewis¹, D. A. Neuendorf¹, T. D. A. Forbes³, T. H. Welsh², and R. D. Randel¹, Texas AgriLife Research, Overton, ²Texas AgriLife Research, College Station, ³Texas AgriLife Research, Uvalde.
4:15 PM  35
**Evaluation of calving and weaning rates for Nellore-Angus straightbred and crossbred cows.**
M. Obeidat*, D. Riley, J. Sanders, and A. Herring, **Texas A&M University, College Station.**

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**Graduate Student Competition II**

Chair: Debra Aaron, University of Kentucky
 **BJCC (3rd Floor) East Meeting Room N**

1:00 PM  36
**Inflammation and oxidative stress in airway epithelial cells following exposure to swine confinement facility dust.**
C. L. Gerald*, S. D. Tatum, C. Y. Watson, and J. T. Waterman, **North Carolina A&T State University, Greensboro.**

1:15 PM  37
**Effects of forage type and gender on performance and carcass characteristics of hair lambs.**
J. D. Kohler*, W. W. Miller, J. L. Vest, M. A. Brown, M. D. Hudson, and E. L. Walker, **Missouri State University, Springfield, USDA ARS Grazinglands Research Laboratory, El Reno, OK.**

1:30 PM  38
**Effect of season of collection and heat shock protein 70 haplotype on semen quality characteristics of Holstein bulls.**
J. D. Patterson*, G. R. Gilbert, M. A. Sales, and C. F. Rosenkrans, **University of Arkansas, Fayetteville, Genex Cooperative Inc., Shawano, WI.**

1:45 PM  39
**Use of a lipopolysaccharide (LPS) challenge to evaluate the innate immune response of Angus heifers with genotypic differences in GeneSTAR Markers for intramuscular fat deposition.**
J. O. Buntyn*, J. A. Carroll, T. Smith, S. M. Falkenberg, J. D. Rivera, N. C. Burdick, and T. B. Schmidt, **Department of Animal and Dairy Sciences, Mississippi State University, Ruminant Diseases and Immunology Research Unit, USDA-ARS, Ames, IA, Mississippi Branch Experiment Station, Poplarville, MS.**

2:00 PM  40
**A comparison of ruminal microbial populations of residual feed intake-indexed Brahman bulls under grazing conditions.**
L. M. Wiley*, L. O. Tedeschi, T. D. A. Forbes, F. M. Rouquette, R. D. Randel, and S. E. Dowd, **Texas A&M University, College Station, Texas Agrilife Research, Uvalde, Texas Agrilife Research, Overton, Medial Biofilm Research Institute and Research and Testing Laboratory, Lubbock, TX.**
2:30 PM  41

**Characterization of enrichment terms essential to beef sensory characteristics in a Nellore-Angus population utilizing Bayesian Inference.**
L. L. Hulsman*, 1, M. R. S. Fortes2, A. Reverter2, R. N. Vaughn3, P. K. Riggs2, R. K. Miller1, J. O. Sanders1, A. D. Herring1, C. A. Gill1, and D. G. Riley1,
1Department of Animal Science, Texas A&M University, College Station, 2CSIRO Livestock Industries, Queensland Bioscience Precinct, Brisbane, Queensland, Australia, 3Graduate Program in Genetics, Texas A&M University, College Station.

2:45 PM  42

**Beef cattle carcass characteristics from continuously stocked triticale, wheat and ryegrass pasture.**
D. A. Tigue*, R. B. Muntifering, S. P. Schmidt, W. F. Owsley, and C. L. Bratcher, Auburn University, Auburn, AL.

3:00 PM  43

**Initial trends in the Kentucky Buck Test Program.**
R. S. Kelly*, T. J. Wistuba2, T. Caudill3, B. C. Williamson1, and R. E. Miculinich1, 1Morehead State University, Morehead, KY, 2Novus International Inc., St. Charles, MO, 3Kentucky Department of Agriculture, Frankfort, KY.

3:15 PM  44

**Characterization of ruminal lipase-producing bacteria and their lipolytic activities in vitro.**
H. D. Edwards*, 1, R. C. Anderson2, S. B. Smith1, R. K. Miller1, T. M. Taylor1, N. A. Krueger2, and N. J. Nisbet2, 1Texas A&M University, College Station, TX, 2United States Department of Agriculture/Agricultural Research Service, Southern Plains Agricultural Research Center, Food & Feed Safety Research Unit, College Station, TX.

Ruminant Animal Production I

Chair: Gary Hill, University of Georgia, Tifton
BJCC (3rd Floor) East Meeting Room O

1:00 PM  45

**Supplemental concentrate for heifers grazing stockpiled fescue.**
M. H. Poore*, 1, A. D. Shaeffer1, S. R. Freeman1, J. M. Scruggs1, G. R. Hansen1, M. L. Alley1, C. S. Whisnant1, and M. E. Drewnoski2, 1North Carolina State University, Raleigh, 2Iowa State University, Ames.
1:15 PM  46
**Effect of daily or alternate day distillers grains supplementation with or without monensin on performance of growing calves—Three trial summary.**

1:30 PM  47
**Comparison of ground, pelleted peanut hulls to loose peanut hulls in diets fed to growing beef cattle.**
J. Starnes*, D. Rankins, and B. Gamble, Auburn University, Auburn, AL.

1:45 PM  48
**Effect of breed and level of inclusion of dried distillers grain (DDG) supplement on intake and digestibility of round bale silage (RBS) diets.**

2:00 PM  49
**Between-animal variation in intake and behavioral patterns associated with consumption of salt-limited dried distillers grain in forage-fed growing steers.**
J. Moreno*, R. Kalina, G. Carstens, J. Walter, A. Hafla, and T. Wickersham, Texas A&M University, College Station.

2:15 PM  50
**Determining the effects of previous nematode control on feedlot growth performance and carcass merit in beef cattle.**

2:30 PM  51
**Use of shrunk body weights did not effectively reduce variability of weight gain of growing steers.**
R. R. Reuter* and C. A. Moffet, The Samuel Roberts Noble Foundation Inc., Ardmore, OK.

2:45 PM  52
**Effects of between-animal variation in feed efficiency, performance, and carcass traits on net revenue in Angus-based composite steers.**
Teaching and Undergraduate Education

Chair: Rebecca Splan, Virginia Tech
BJCC (3rd Floor) East Meeting Room J

1:00 PM 53
Student Perceptions of the MTSU School of Agribusiness and Agriscience.
W. Gill, J. Gardner, A. Neely, and J. Carter*, Middle Tennessee State University School of Agribusiness and Agriscience, Murfreesboro.

1:15 PM 54
Case study on development and effectiveness of a practicum in livestock welfare and management course.
D. Mulvaney*, B. Anderson, A. Chandler, G. Richburg, and D. Coleman, Animal Sciences, Auburn University, Auburn, AL.

1:30 PM 55
Creation of media and issues management simulation modules for students enrolled in a course dealing with Issues in Animal Science.
D. R. Mulvaney*1 and M. V. Morgan*, 1Animal Sciences, Auburn, AL, 2Alabama Cooperative Extension System, Auburn.

1:45 PM Discussion.

Ruminant Animal Production II

Chair: Russell Muntifering, Auburn University
BJCC (3rd Floor) East Meeting Room O

3:15 PM 56
Poured protein blocks, a distillers grain product and cottonseed fed with hay to beef cows in winter.
G. M. Hill*, K. C. Halbig1, J. Moore1, C. H. Knight1, A. Scheaffer2, and B. G. Mullinix1, 1University of Georgia, Tifton, 2SweetPro, LLC, Walhalla, ND.

3:30 PM 57
Intake, in situ disappearance, and ruminal fermentation of bermudagrass hay by lactating beef cows offered hominy feed or corn as supplements.
Z. Madzonga, A. Young, K. Coffey*, D. Philipp, and E. Kegley, University of Arkansas Division of Agriculture, Fayetteville.

3:45 PM 58
Evaluating hay waste and animal performance when fed supplemental liquid protein or dried distillers grains with aged low- to medium quality hay to late gestating beef cattle.
R. S. Walker*, D. LaMay¹, J. R. Davis², and C. A. Bandyk², ¹LSU AgCenter, Hill Farm Research Station, Homer, ²Quality Liquid Feeds, Dodgeville, WI.

4:00 PM  59
Effects of ruminally undegradable protein supplement on performance and feed intake of beef heifers fed ryegrass baleage.
J. D. Rivera*, L. W. Fitzgerald, M. L. Gipson, K. L. Odom, and R. A. Gipson, MAFES South MS Branch Experiment Station, Poplarville, MS.

4:15 PM  60
Effects of trace mineral injection 28 days before weaning on calf health, performance, and carcass characteristics.
E. B. Kegley*, K. P. Coffey¹, J. T. Richeson¹, and D. S. Hubbell², ¹Animal Science Department, University of Arkansas Division of Agriculture, Fayetteville, ²Livestock and Forestry Research Station, Batesville.

4:30 PM  61
Effects of trace mineral-fortified, limit-fed supplements on performance of beef calves.
P. Moriel* and J. D. Arthington, University of Florida, Range Cattle Research and Education Center.

4:45 PM  62
Association between a lactate dehydrogenase gene mutation and horn fly infestation of beef cows.
C. F. Rosenkrans*, A. R. Mays¹, M. A. Brown², A. H. Brown¹, and C. D. Steelman¹, ¹University of Arkansas, Fayetteville, ²USDA-ARS, El Reno, OK.

Tuesday, February 7

Physiology

Chair: Olga Bolden-Tiller, Tuskegee University
BJCC (3rd Floor) East Meeting Room O

8:00 AM  63
Effects of transportation duration on feeding behavior, watering behavior and feed efficiency of freshly weaned Brahman x Hereford calves.
A. N. Loyd⁴,⁵, R. R. Reuter¹, B. L. Bradbury¹⁶, R. C. Vann³, J. P. Banta⁴, J. A. Carroll⁵, T. H. Welsh¹, and R. D. Randel⁶, ¹Texas AgriLife Research, College Station, TX, ²The Samuel Roberts Noble Foundation, Ardmore, OK, ³MAFES, Mississippi State University, Raymond, ⁴Texas AgriLife Extension, Overton, TX, ⁵Livestock Issues Research Unit, USDA-ARS, Lubbock, TX, ⁶Texas AgriLife Research, Overton, TX.
Effects of long versus short duration transportation on body composition of Brahman x Hereford calves.
A. N. Loyd1,2, R. R. Reuter2, R. C. Vann3, J. P. Banta4, J. A. Carroll5, T. H. Welsh1, and R. D. Randel4, 1Texas AgriLife Research, College Station, 2The Samuel Roberts Noble Foundation, Ardmore, OK, 3MAFES, Mississippi State University, Raymond, 4Texas AgriLife Extension, Overton, 5Livestock Issues Research Unit, USDA-ARS, Lubbock, TX.

Use of unique semen collection device improves conception rates of bovine.
K. Graves-Evenson1, J. Weathers3, L. Penrose2, D. Johnson2, R. Kauffman1, and S. Prien2, 1Texas Tech University Health Sciences Center, Amarillo, 2Texas Tech Health Sciences Center, Lubbock, 3Southeast Missouri State University, Cape Girardeau.

Relationship between horn fly infestation and polymorphisms in the cytochrome P450 gene in beef cows.
A. R. Mays1, M. A. Brown2, A. H. Brown1, C. D. Steelman1, and C. F. Rosenkrans1, 1University of Arkansas, Fayetteville, 2USDA-ARS, Grazinglands Research Laboratory, El Reno, OK.

Influence of heat stress on the immune response of Angus and Romosinuano heifers to an LPS challenge.
N. C. Burdick1, R. Chaffin2, J. A. Carroll1, C. C. Chase3, S. W. Coleman3, and D. E. Spiers3, 1USDA-ARS Livestock Issues Research Unit, Lubbock, TX, 2University of Missouri, Division of Animal Science, Columbia, 3USDA-ARS Sub-Tropical Research Station, Brooksville, FL.

Heat stress decreases the metabolic response of Angus but not Romosinuano heifers to an LPS challenge.
N. C. Burdick1, R. Chaffin2, J. A. Carroll1, C. C. Chase3, S. W. Coleman3, and D. E. Spiers3, 1USDA-ARS Livestock Issues Research Unit, Lubbock, TX, 2University of Missouri, Division of Animal Sciences, Columbia, 3USDA-ARS Sub-Tropical Agricultural Research Station, Brooksville, FL.

Live yeast and citrus pulp supplementation reduces the presence of rectal salmonella without impairing performance in young pigs.
N. C. Burdick3, J. A. Carroll1, T. R. Callaway3, E. Chevaux3, and D. Rosener3, 1USDA-ARS Livestock Issues Research Unit, Lubbock, TX, 2USDA-ARS Food and Feed Safety Research Unit, College Station, 3USDA-ARS Food and Feed Safety Research Unit, Lubbock, TX.
10:00 AM  70  
**In vitro fertility of cryo-preserved spermatozoa from boars fed diets supplemented with selenium.**  
M. J. Estienne*1 and B. D. Whitaker2, 1Virginia Tech, Blacksburg, 2University of Findlay, Findlay, OH.

10:15 AM  71  
**Single nucleotide polymorphisms of the FSHβ gene and effects on semen quality.**  
A. J. Davis*1, D. L. Kreider1, C. F. Rosenkrans1, J. G. Powell1, R. W. Rorie1, M. L. Looper1, M. P. Rowe1, C. L. Williams1, R. J. Page1, T. D. Lester1, and J. B. Woolley2, 1Dept. of Animal Science, University of Arkansas, Fayetteville, 2USDA-ARS, Booneville, AR.

10:30 AM  72  
**Does altering the timing of insemination with gender sorted bovine semen affect pregnancy rates?**  
J. D. Rhinehart*1, L. H. Anderson2, F. N. Schrick1, A. Fisher1, A. M. Arnett3, R. Burris2, and M. DeJarnette3, 1The University of Tennessee, 2University of Kentucky, 3Select Sires Inc.

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**Extension I**

**Chair: Justin Rhinehart, University of Tennessee**  
**BJCC (3rd Floor) East Meeting Room K**

8:30 AM  73  
**Assessment of beef cattle extension publication use via Internet download monitoring.**  
B. M. Bourg*, J. A. Parish, and R. Noffsinger, Mississippi State University, Mississippi State.

8:45 AM  74  
**Electronic delivery of a Regional Beef Cattle Genetics Learn at Lunch extension program.**  
J. A. Parish*, T. Smith, B. M. Bourg*1, S. Hankins1, S. M. Fulgham1, W. S. Belvin1, L. A. Kriese-Anderson2, and M. F. Elmore2, 1Mississippi State University, Mississippi State, 2Auburn University, Auburn, AL.

9:00 AM  75  
**Reaching a connected audience by posting conference video recordings to the internet.**  
S. Gadberry*1, B. Barham1, T. Troxel1, J. Jennings1, P. Beck2, and J. Powell3, 1University of Arkansas, Cooperative Extension Service, Little Rock, 2University of Arkansas, Southwest Research and Extension Center, Hope, 3University of Arkansas, Department of Animal Science, Fayetteville.
9:15 AM  76  
**Impact of phenotypic characteristics on selling price of Texas feeder cattle.**
M. Beverly*, S. Kelley, K. Stutts, and B. Freel, Sam Houston State University, Huntsville, TX.

9:30 AM  77  
**Management practices on selling price of Texas feeder cattle.**
K. Stutts*, M. Beverly, S. Kelley, and B. Freel, Sam Houston State University, Huntsville, TX.

9:45 AM  
**Break**

10:00 AM  78  
**Health characteristics and their impact on selling price of Texas feeder cattle.**
S. Kelley*, K. Stutts, M. Beverly, and B. Freel, Sam Houston State University, Huntsville, TX.

10:15 AM  79  
**The effect of livestock auction barn size and phenotypic traits on sale price of calves in Oklahoma.**
D. O. Alkire*¹, J. A. Robinette², and R. R. Reuter³, ¹The Samuel Roberts Noble Foundation, Ardmore, OK, ²University of Arkansas, Fayetteville.

10:30 AM  80  
**Historical assessment of distance between bull buyer addresses and sale sites in the southeast USA.**
M. L. Marks*, J. A. Parish¹, B. M. Bourg¹, L. A. Kriese-Anderson², M. F. Elmore², and J. P. Cassady³, ¹Mississippi State University, Mississippi State, ²Auburn University, Auburn, AL, ³North Carolina State University, Raleigh.

10:45 AM  81  
**Effect of anthelmintic formulations on FECR and ADG of stocker steers.**
R. R. Reuter* and R. S. Wells, The Samuel Roberts Noble Foundation Inc., Ardmore, OK.

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**Pastures and Forages**

**Chair:** Paul Beck, University of Arkansas  
**SWREC**  
**BJCC (3rd Floor) East Meeting Room I**

8:30 AM  
**Managing Tall Fescue Toxicosis in Beef Cattle: Reproductive and Pre-Weaning Effects.**
J. Andrae and S. Pratt.

8:55 AM  
**Discussion.**

9:00 AM  
**Managing Tall Fescue Toxicosis in Beef Cattle: Effects on Subsequent Production Phases.**
J. Caldwell and K. Coffey.
9:25 AM  Discussion.

9:30 AM  82  Additive effects of implants and ionophores on performance of growing steers grazing wheat pasture.
P. Beck1*, T. Hess2, D. Hubbell3, B. Fieser3, and D. Hufstedler4, 1University of Arkansas SWREC, Hope, 2University of Arkansas LFRS, Batesville, 3ADM Alliance Nutrition, Stillwater, OK, 4Elanco Animal Health Beef Cattle - Stocker District, Guthrie, OK.

9:45 AM  83  Evaluation of early weaned calves grazing annual ryegrass or annual ryegrass-triticale mixtures in south Florida.
R. D. Speckmann1*, J. M. B. Vendramini1, J. D. Arthington1, A. R. Blount2, and A. D. Aguiar1, 1University of Florida, Range Cattle Research and Education Center, Ona, 2University of Florida, North Florida Research and Education Center, Marianna.

10:00 AM  84  Breed and winter nutrition effects on diet digestibility and intake of cows grazing bahiagrass pastures.
S. W. Coleman*, C. C. Chase, M. J. Williams, D. G. Riley, and E. J. Bowers, USDA-ARS Subtropical Agricultural Research Station, Brooksville, FL.

10:15 AM  85  Overseeding cool season legumes into Bermudagrass pastures: Impact on winter forage yield and quality over two growing seasons.
S. R. Freeman*, M. H. Poore, H. M. Glennon, and A. D. Shaeffer, North Carolina State University, Raleigh.

10:30 AM  86  Evaluation of three bermudagrass varieties for grazing and hay production.
G. Scaglia1*, J. Rodriguez1, and H. T. Boland2, 1Louisiana State University Agricultural Center, Iberia Research Station, Jeanerette, LA, 2Mississippi State University, Prairie Unit, Prairie.

10:45 AM  87  Steer performance and nitrogen use efficiency in stocker production systems utilizing warm-season perennial grass pasture.

11:00 AM  88  Economics of Utilizing Clover in Tall Fescue Pastures for Stocker Cattle.
P. Beck1*, M. Haque2, J. Biermacher2, T. Hess3, and D. Hubbell3, 1University of Arkansas SWREC, Hope, 2Noble Foundation, Ardmore, OK, 3University of Arkansas LFRS, Batesville.
Small Ruminant Production

Chair: Sandra Solaiman, Tuskegee University
BJCC (3rd Floor) East Meeting Room J

8:50 AM 89
The identification of testosterone-regulated genes in the goat testis.
O. Bolden-Tiller*, A. Knox, A. Reyes, L. Clark, C. Collins, and C. Wright, Tuskegee University, Tuskegee Institute, AL.

9:05 AM 90
Productivity of Polypay, White Dorper and White Dorper x Polypay ewes bred to Hampshire rams in a pasture-based production system.

9:20 AM 91
Carcass characteristics of pasture vs. pen-fed goats.
S. Schoenian*1, J. Semler2, D. Gordon3, M. B. Bennett4, and D. J. O'Brien5, 1University of Maryland, Keedysville, MD, 2University of Maryland, Boonsboro, 3University of Maryland, Derwood, 4West Virginia University, Martinsburg, 5Delaware State University, Dover.

9:35 AM 92
Effect of season and by-pass fat supplementation on milk composition of hair sheep ewes lambing in spring and fall.
S. Wildeus*1 and S. S. Zeng2, 1Virginia State University, Petersburg, 2Langston University, Langston, OK.

9:50 AM 93
Efficacy of pumpkin seed oil in controlling internal parasites in Katahdin lambs.
K. K. Matthews*1, D. J. O'Brien1, N. C. Whitley2, J. E. Miller2, J. M. Burke3, and R. A. Barczewski1, 1Delaware State University, Dover, 2North Carolina A&T State University, Greensboro, 3Louisiana State University, Baton Rouge, 4USDA, ARS, Dale Bumpers Small Farms Research Center, Booneville, AR.

10:05 AM 94
Potential of copper sulfate to cause toxicity when used as an anthelmintic for sheep.

10:20 AM 95
Impact of tannins-containing pine bark as feed ingredient on dry matter intake, digestibility, nitrogen balance and mineral retention in goats.
B. R. Min*, S. Solaiman, E. Taha, and N. Gurung, Tuskegee University, Tuskegee, AL.

Extension II

Chair: Justin Rhinehart, University of Tennessee
BJCC (3rd Floor) East Meeting Room K

2:00 PM  96  Efficacy of ivermectin and fenbendazol in weaned calves.
M. H. Poore* and M. L. Alley, North Carolina State University, Raleigh.

2:15 PM  97  Anthelmintic resistance testing and agricultural professional training on horse farms in North Carolina.
N. C. Whitley¹, R. M. Kaplan², R. A. Franco¹, K. Moulton¹, and A. E. Cooper¹, ¹North Carolina A&T State University, Greensboro, ²University of Georgia, Athens.

2:30 PM  98  Comparison of antibiotic post-treatment intervals for bovine respiratory disease in high-risk stocker calves.

N. Jaeger², R. Owen*¹, W. F. Owlsley¹, D. Wolfe¹, and S. Rodning¹, ¹Auburn University, Auburn, AL, ²Alabama Farmers Federation, Montgomery.

3:00 PM  100  Ability of novice producers to identify their information needs.
J. C. Wright*¹, J. D. Donnell¹, R. R. Reuter¹, D. O. Alkire¹, and C. A. Craig²¹, ¹Samuel Roberts Noble Foundation Inc., Ardmore, OK, ²Oklahoma State University, Stillwater.

3:15 PM  Break

3:30 PM  101  Building confidence, skills and leadership of women cattle producers.

3:45 PM  102  Outcome measurements of small ruminant tool box workshops.
S. M. Jones*¹, L. Coffey², and M. Hale², ¹University
4:00 PM 103
Producer evaluation of the TN Master Beef Producer Program.
J. B. Neel1*, B. T. Campbell1, F. D. Kirkpatrick1, C. D. Lane1, and W. W. Gill2, 1The University of Tennessee, Knoxville, 2Middle Tennessee State University, Murfreesboro, TN.

4:15 PM 104
Comparison of temperature susceptibility in three different types of outdoor swine huts.