

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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Elanco Animal Health
Greenfield, IN

Extension Award

Boehringer Ingelheim, Vetmedica
Division
St. Joseph, MO

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@assoqh.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.**
S. D. Perkins*, C. N. Key, C. F. Garrett, C. D.
Foradori, C. L. Bratcher, L. A. Kriese-Anderson, and
T. D. Brandebourg, *Auburn University, Auburn, AL.*

8:30 AM 2

Lean beef trim improved fresh and cooked quality characteristics of ground beef patties.

C. T. Moon*, J. W. S. Yancey, J. K. Apple, J. J. Hollenbeck, T. M. Johnson, and A. R. Winters, *Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville.*

8:45 AM 3

Color development and stability in the beef longissimus thoracis (LT) and psoas major (PM).

R. A. Reese*, J. K. Apple, J. W. S. Yancey, J. J. Hollenbeck, and T. M. Johnson, *Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville.*

9:00 AM 4

Regulation of marbling in heifers in response to age and pasture versus grain finishing.

C. N. Key*, S. D. Perkins, C. F. Garrett, C. L. Bratcher, L. A. Kriese-Anderson, and T. D. Brandebourg, *Auburn University, Auburn, AL.*

9:15 AM 5

The use of real-time ultrasound and predictive software to estimate carcass yield and quality of fed cattle.

K. J. Kelly^{*1}, B. C. Williamson¹, R. S. Miculinch¹, 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. Penick^{*1}, 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. Keith^{*1,2}, A. W. Lewis¹, D. A. Neuendorff¹, R. C. Vann³, T. H. Welsh², and R. D. Randel¹, ¹Texas AgriLife Research, Overton, ²Texas AgriLife

Research, College Station, ³MAFES, Mississippi State University, Raymond.

10:45 AM 10

Impact of different handling styles (good vs. adverse) on growth performance, behavior, and cortisol concentrations in beef cattle.

J. M. Bauer*, E. B. Kegley, J. T. Richeson, D. L. Galloway, J. A. Hornsby, and J. L. Reynolds, University of Arkansas, Fayetteville.

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. Szabo¹, 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. Reuter², P. Beck³, F. Ribeiro⁴, B. Stewart³, H. Gray³, and J. Apple¹, 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 limpgrass pastures in Florida.

A. D. Aguiar¹, J. M. B. Vendramini¹, J. D. Arthington¹, L. E. Sollenberger², J. M. Bennet², M. Hersom², A. Valente¹, and P. Salvo¹, ¹*Range Cattle Research Education Center, Ona, Florida, US,* ²*University of Florida, Gainesville.*

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

J. C. Wicks*, T. K. Welch, W. F. Owsley, S. P. Rodning, M. Singh, M. D. Hayden, H. M. Finegan, K. A. Cummins, L. A. Kriese-Anderson, and C. L. Bratcher, *Auburn University, Auburn, AL.*

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.

T. K. Welch*, J. C. Wicks, L. A. Kriese-Anderson, H. M. Finegan, M. R. Worosz, T. D. Brandebourg, R. B. Muntifering, J. Edmonson, and C. L. Bratcher, *Auburn University, Auburn, AL.*

11:00 AM 21

The impact of swine management operations on large airway morphology of pigs.

C. McClendon*, S.-H. Oh, and J. T. Waterman, *North Carolina A&T State University, Greensboro.*

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.

E. L. Oxford*, A. H. Brown, J. G. Powell, K. S. Anschutz, B. R. Kutz, M. L. Thomas, and C. M. Turner, *University of Arkansas, Division of Agriculture, Fayetteville.*

1:15 PM 24

Relationship of horn fly infestation to polymorphisms in heat shock protein 70 gene in beef cows.

C. M. Turner*¹, A. R. Mays¹, A. H. Brown¹, C. D. Steelman¹, and C. F. Rosenkrans¹, ¹*University of Arkansas, Fayetteville,* ²*USDA/ARS Grasslands Research Laboratory, El Reno.*

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*¹, D. Bautista², D. Hanson², N. Whitley¹, M. Morrow², and M. T. See², ¹*North Carolina A&T State University, Greensboro,* ²*North Carolina State University, Raleigh.*

1:45 PM 26

Growth of Berkshire crossbreds sired by Tamworth and Large Black.

S.-H. Oh*¹, M. Morrow², and T. See², ¹*North Carolina A&T State University, Greensboro, NC,* ²*North Carolina State University, Raleigh, NC.*

2:00 PM 27

Relationship of underline score with growth, carcass and maternal traits in Beefmaster cattle.

B. R. Kutz*¹, A. H. Brown¹, E. L. Oxford¹, T. L. Perkins², Z. B. Johnson¹, and C. F. Rosencrans¹, ¹*University of Arkansas, Division of Agriculture, Fayetteville,* ²*Beefmaster Breeders United, San Antonio, TX.*

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.

D. L. Kuhlert*¹, K. Nadarajah¹, G. L. Thompson^{2,3}, B. E. Norris³, H. D. Harkins³, and L. Kriese-Anderson^{1,2}, ¹*Department of Animal Sciences, Auburn University, AL,* ²*Alabama Cooperative Extension System, Auburn,* ³*Tennessee Valley Research and Extension Center, Belle Mina, AL.*

2:30 PM 29

Selection for small frame size of Angus cattle in Alabama. 2. Phenotypic correlations and growth pattern of replacement heifers.

K. Nadarajah^{*1}, D. L. Kuhlers¹, G. L. Thompson^{2,3}, B. E. Norris³, H. D. Harkins³, and L. Kriese-Anderson^{1,2},
¹Department of Animal Sciences, Auburn University, Auburn, AL, ²Alabama Cooperative Extension System, Auburn, ³Tennessee Valley Research and Extension Center, Belle Mina, AL.

2:45 PM **Break**

3:00 PM 30

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. DeRouen⁴, D. E. Franke⁵, W. E. Wyatt⁶, R. C. Vann⁷, G. R. Hansen⁸, and D. G. Riley⁹, ¹University 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.

3:15 PM 31

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

A. R. Starnes^{*}, A. H. Brown, Z. B. Johnson, and C. F. Rosenkrans, *University of Arkansas, Fayetteville.*

3:30 PM 32

QTL identification for udder traits in *Bos indicus*-*Bos taurus* cows using Bayesian inference.

M. E. Williams^{*}, 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.*

3:45 PM 33

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, ¹Department of Animal Science, Texas A&M University, College Station, ²CSIRO Livestock Industries, Queensland Bioscience Precinct, Brisbane, Australia.

4:00 PM 34

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. Neuendorff¹, T. D. A. Forbes³, T. H. Welsh², and R. D. Randel¹, ¹Texas 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.

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*¹, W. W. Miller¹, J. L. Vest¹, M. A. Brown², M. D. Hudson¹, and E. L. Walker¹, ¹*Missouri State University, Springfield*, ²*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*¹, G. R. Gilbert², M. A. Sales¹, and C. F. Rosenkrans¹, ¹*University of Arkansas, Fayetteville*, ²*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*¹, J. A. Carroll², T. Smith¹, S. M. Falkenberg³, J. D. Rivera⁴, N. C. Burdick², and T. B. Schmidt¹, ¹*Department of Animal and Dairy Sciences, Mississippi State University*, ²*Livestock Issues Research Unit, USDA-ARS, Lubbock, TX*, ³*Ruminant Diseases and Immunology Research Unit, USDA-ARS, Ames, IA*, ⁴*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*¹, L. O. Tedeschi¹, T. D. A. Forbes², F. M. Rouquette³, R. D. Randel³, and S. E. Dowd⁴, ¹*Texas A&M University, College Station*, ²*Texas Agrilife Research, Uvalde*, ³*Texas Agrilife Research, Overton*, ⁴*Medial Biofilm Research Institute and Research and Testing Laboratory, Lubbock, TX.*

2:15 PM

Break

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. Riggs¹, 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,* ²*CSIRO Livestock Industries, Queensland Bioscience Precinct, Brisbane, Queensland, Australia,* ³*Graduate 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^{*1}, T. J. Wistuba², T. Caudill³, B. C. Williamson¹, and R. E. Miculinich¹, ¹*Morehead State University, Morehead, KY,* ²*Novus International Inc., St. Charles, MO,* ³*Kentucky 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, ¹*Texas A&M University, College Station, TX,* ²*United 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, ¹*North Carolina State University, Raleigh,* ²*Iowa 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.

P. Beck¹, S. Gadberry², J. Butterbaugh³, B. Rudolph³, J. Tucker⁴, T. Hess⁴, D. Hubbell⁴, B. Stewart¹, and H. Gray¹, ¹University of Arkansas SWREC, Hope, ²University of Arkansas Cooperative Extension Service, Little Rock, ³Furst-McNess Co, Freeport, IL, ⁴University of Arkansas LFRS, Batesville.

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.

E. N. Alava*, C. A. Welchons, M. J. Hersom, and J. V. Yelich, University of Florida, Gainesville.

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.

J. J. Hollenbeck*, J. G. Powell, J. K. Apple, K. P. Coffey, C. A. Tucker, M. P. Rowe, and J. L. Reynolds, University of Arkansas, Fayetteville.

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.

J. T. Walter, A. N. Hafla*, G. E. Carstens, J. C. Bailey, J. W. Behrens, J. G. Moreno, D. S. Hale, R. K. Miller, J. E. Sawyer, and D. Anderson, Texas A&M University, College Station.

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. Morgan², ¹*Animal Sciences, Auburn, AL,* ²*Alabama 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*¹, K. C. Halbig¹, J. Moore¹, C. H. Knight¹, A. Scheaffer², and B. G. Mullinix¹, ¹*University of Georgia, Tifton,* ²*SweetPro, 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^{*1}, 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^{*1}, 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^{*1}, 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. Loyd^{*1,5}, R. R. Reuter², B. L. Bradbury^{1,6}, 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.

8:15 AM 64

Effects of long versus short duration transportation on body composition of Brahman x Hereford calves.

A. N. Loyd^{*1,5}, 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.

8:30 AM 65

Use of unique semen collection device improves conception rates of bovine.

K. Graves-Evenson^{*1}, 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.

8:45 AM 66

Relationship between horn fly infestation and polymorphisms in the cytochrome P450 gene in beef cows.

A. R. Mays^{*1}, 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.

9:00 AM 67

Influence of heat stress on the immune response of Angus and Romosinuano heifers to an LPS challenge.

N. C. Burdick^{*1}, R. Chaffin², J. A. Carroll¹, C. C. Chase³, S. W. Coleman³, and D. E. Spiers², ¹USDA-ARS Livestock Issues Research Unit, Lubbock, TX, ²University of Missouri, Division of Animal Science, Columbia, ³USDA-ARS Sub-Tropical Research Station, Brooksville, FL.

9:15 AM **Break**

9:30 AM 68

Heat stress decreases the metabolic response of Angus but not Romosinuano heifers to an LPS challenge.

N. C. Burdick^{*1}, R. Chaffin², J. A. Carroll¹, C. C. Chase³, S. W. Coleman³, and D. E. Spiers², 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.

9:45 AM 69

Live yeast and citrus pulp supplementation reduces the presence of rectal salmonella without impairing performance in young pigs.

N. C. Burdick^{*1}, J. A. Carroll¹, T. R. Callaway², E. Chevaux³, and D. Rosener³, ¹USDA-ARS Livestock Issues Research Unit, Lubbock, TX, ²USDA-ARS Food and Feed Safety Research Unit, College

Station, TX, ³Lallemand Specialties Inc., Milwaukee, WI.

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 FSH β 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.

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*¹, T. Smith¹, B. M. Bourg¹, 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. Alkire¹, J. A. Robinette², and R. R. Reuter¹,
¹*The Samuel Roberts Noble Foundation, Ardmore, OK,* ²*University of Arkansas, Fayetteville.*

10:30 AM 80

Historical assessment of distance between bull buyer addresses and sale sites in the southeast USA.

M. L. Marks¹, J. A. Parish¹, B. M. Bourg¹, L. A. Kriese-Anderson², M. F. Elmore², and J. P. Cassady³, ¹*Mississippi State University, Mississippi State,* ²*Auburn University, Auburn, AL,* ³*North 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.*

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. Beck^{*1}, T. Hess², D. Hubbell², B. Fieser³, and D. Hufstедler⁴, ¹*University of Arkansas SWREC, Hope*, ²*University of Arkansas LFRS, Batesville*, ³*ADM Alliance Nutrition, Stillwater, OK*, ⁴*Elanco 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. Speckmann^{*1}, J. M. B. Vendramini¹, J. D. Arthington¹, A. R. Blount², and A. D. Aguiar¹, ¹*University of Florida, Range Cattle Research and Education Center, Ona*, ²*University 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. Scaglia^{*1}, J. Rodriguez¹, and H. T. Boland², ¹*Louisiana State University Agricultural Center, Iberia Research Station, Jeanerette, LA*, ²*Mississippi 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.

B. D. Wallis^{*}, P. A. Lancaster, E. D. Sharman, D. B. Arnall, J. G. Warren, T. E. Ochsner, S.R. Lancaster, and G. W. Horn, *Oklahoma Agricultural Experiment Station, Stillwater*.

11:00 AM 88

Economics of Utilizing Clover in Tall Fescue Pastures for Stocker Cattle.

P. Beck^{*1}, M. Haque², J. Biermacher², T. Hess³, and D. Hubbell³, ¹*University of Arkansas SWREC, Hope*, ²*Noble Foundation, Ardmore, OK*, ³*University 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.

D. K. Aaron*, D. G. Ely, M. E. Hoar, E. Fink, and B. T. Burden, *University of Kentucky, Lexington.*

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, ¹*University of Maryland, Keedysville, MD,* ²*University of Maryland, Boonsboro,* ³*University of Maryland, Derwood,* ⁴*West Virginia University, Martinsburg,* ⁵*Delaware 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, ¹*Virginia State University, Petersburg,* ²*Langston 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. Miller³, J. M. Burke⁴, and R. A. Barczewski¹, ¹*Delaware State University, Dover,* ²*North Carolina A&T State University, Greensboro,* ³*Louisiana State University, Baton Rouge,* ⁴*USDA, 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.

M. M. Simpson, M. E. Hoar*, D. K. Aaron, E. Fink, B. T. Burden, and D. G. Ely, *University of Kentucky, Lexington.*

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. Whitley*¹, R. M. Kaplan², R. A. Franco¹, K.
Moulton¹, and A. E. Cooper¹, ¹*North Carolina A&T
State University, Greensboro*, ²*University of Georgia,
Athens.*

2:30 PM 98

**Comparison of antibiotic post-treatment intervals
for bovine respiratory disease in high-risk
stocker calves.**

A. C. Brown*, J. T. Richeson, E. B. Kegley, J. G.
Powell, and J. A. Hornsby, *Department of Animal
Science, University of Arkansas, Fayetteville.*

2:45 PM 99

Animal Ag 101: Basics Concepts of Animal Care.

N. Jaeger², R. Owen*¹, W. F. Owsley¹, D. Wolfe¹,
and S. Rodning¹, ¹*Auburn University, Auburn, AL*,
²*Alabama 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. Craige^{2,1}, ¹*Samuel Roberts Noble
Foundation Inc., Ardmore, OK*, ²*Oklahoma State
University, Stillwater.*

3:15 PM **Break**

3:30 PM 101

**Building confidence, skills and leadership of
women cattle producers.**

A. D. Shaeffer*, J. A. Moore, S. R. Freeman, M. L.
Alley, M. H. Poore, and M. J. Kistler, *North Carolina
State University, Raleigh.*

3:45 PM 102

**Outcome measurements of small ruminant tool
box workshops.**

S. M. Jones*¹, L. Coffey², and M. Hale², ¹*University*

*of Arkansas, Little Rock, ²National Center for
Appropriate Technology, Fayetteville, AR.*

4:00 PM 103

**Producer evaluation of the TN Master Beef
Producer Program.**

J. B. Neel^{*1}, B. T. Campbell¹, F. D. Kirkpatrick¹, C.
D. Lane¹, and W. W. Gill^{2,1}, *The 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.**

W. Choi and S.-H. Oh^{*}, *North Carolina Agricultural
and Technical State University, Greensboro.*