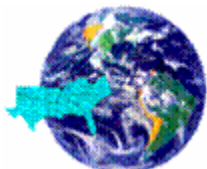


SOUTHERN SECTION

**American Society
of Animal Science**

ANNUAL MEETING

**February 4–8, 2006
Orlando, Florida**



**In conjunction with the 103rd
Annual Convention of the Southern Association of
Agricultural Scientists**



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Swine Industry Award for Innovation

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Extension Award

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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: Advisor's Meeting Gainesville, FL

Saturday, February 4

AQ Lab Practicum

8:00 am - Noon Gainesville, FL

AQ Written Exam

1:00 - 5:00 pm Gainesville, FL

Sunday, February 5

AQ Quiz Bowl

8:00 am - noon Tangerine A,
Paradise

AQ Oral Presentations

8:00 am - noon Ormond, Venice,
Dayonta, Madeira

Registration

11:00 - 5:00 pm Palms Ballroom
Foyer

AQ Quiz Bowl Championship & Awards Program

2:00 - 3:30 pm Siesta/Biscayne

ARPAS Exam

3:00 - 5:00 pm Coquina

Information Exchange Groups:

IEG-72 Enhancing Reproduction in Cattle - Rhonda
Vann, President

1:00 - 4:00 pm Clearwater

IEG-75 Strategies for Southern Forages - Gary Hill,
President

1:00 - 4:00 pm Marathon & Cedar

IEG - Small Ruminant Production - Sam Jackson,
President

1:00 - 4:00 pm Cocoa

SAAS Opening Symposium

4:00 - 6:00 pm Citrus Ballroom,
Orange/Lemon

ASAS Southern Section Advisory Committee/Executive
Committee

6:00 - 8:00 pm Coquina

Monday, February 6

Registration
7:00 am - Noon Palms Ballroom
Foyer

ARPAS Exams
10:00 - noon Paradise

Undergraduate Student Competition
8:00 - 10:00 am Lime

Graduate Student Paper Competition I
10:15 am - Noon Lime

Registration
1:00 - 4:00 pm Palms Ballroom
Foyer

ARPAS Exams
2:00 - 4:00 pm Ormond

Graduate Student Paper Competition II
1:00 - 3:15 pm Lime

Breeding and Genetics
1:00 - 2:15 pm Largo

Physiology I
1:00 - 5:00 pm Orange

Ruminant Animal Production I
1:00 - 4:15 p.m. Siesta/Biscayne

Pastures and Forages I
1:15 - 2:15 p.m. Cocoa

Pastures and Forages II
2:30 - 3:30 p.m. Cocoa

Business Meeting
5:00 - 7:00 pm Orange

Small Ruminant Subcommittee of the NAGP
7:00 - 9:00 pm Palms Ballroom
Salon B

Tuesday, February 7

Registration
8:00 - noon Palms Ballroom
Foyer

Meats I
8:00 - 9:30 am Tangerine B

Small Ruminant Production

8:00 - 12:15 pm	Siesta/Biscayne
Extension I 8:30 - 11:30 am	Orange
Physiology II 8:30 - 11:15 am	Marathon & Cedar
Extension Luncheon Noon - 2:00 pm	Oleander B
Meats II 1:00 - 5:00 pm	Orange
Physiology III 1:00 - 4:45	Marathon & Cedar
Ruminant Animal Production II 1:00 - 5:00 pm	Tangerine B
Extension II 2:15 - 4:15 pm	Siesta/Biscayne

**ASAS Southern Section Meeting
Orlando, Florida
February 4–8, 2006**

**Monday, February 6
SYMPOSIA and ORAL SESSIONS**

Undergraduate Student Competition

Chair: A. Hayden Brown,
University of Arkansas, Fayetteville
Monday 8:00 - 10:00
Lime

- 1 8:00 AM Estrus detection in gilts using digital infrared thermal imaging. D. Sykes*, A. Chromiak, S. Couvillion, P. Gerard, M. Crenshaw, S. Willard, and P. Ryan, Mississippi State University, Mississippi State.
- 2 8:15 AM Effect of social status of dairy heifers on expression of estrus and subsequent fertility. D. A. Elkins* and R. W. Rorie, University of Arkansas, Fayetteville.
- 3 8:30 AM The effect of breed type on real-time ultrasound carcass traits, performance and pelvic measurement of heifers enrolled in the Eastern Kentucky Heifer Development Program. S. Wheeler*, T. Wistuba, P. Prater, and J. Willard, Morehead State University, Morehead, KY.
- 4 8:45 AM Effects of grain by-products in supplements for stocker cattle grazing bermudagrass. T. E. Davis*, E. B. Kegley, K. P. Coffey, W. K. Coblenz, R. K. Ogden, and J. A. Hornsby, University of Arkansas, Fayetteville.
- 5 9:00 AM Dry matter intake and digestibility of annual and perennial cool season grasses fed to lambs as high moisture hay. C. D. Farris*¹, W. A. Phillips², G. W. Horn¹, B. K. Northup², and H. S. Mayeux², ¹Oklahoma Agricultural Experiment Station, Stillwater, OK, ²USDA-ARS Grazinglands Research Laboratory, El Reno, OK.
- 6 9:15 AM Nutrient utilization in Polypay and percentage White Dorper lambs fed a high roughage and a high concentrate diet. A. K. Lunsford*, D. G. Ely, D. K. Aaron, M. L. Mallory, and R. A. Zinner, University of Kentucky, Lexington.
- 7 9:30 AM The use of alkanes to estimate forage intake of steers grazing either different fescue types or Lakota prairie grass. S. Gregory*, G. Scaglia, O. Abaye, and L. Stewart, Virginia Tech, Blacksburg, VA.
- 8 9:45 AM Influence of postmortem aging treatments on tenderness of beef steaks from three breed types. E. R. Daniels*, T. D. Bidner, M. A. Persica, and D. E. Franke, Louisiana State University Agricultural Center, Baton Rouge., Baton Rouge.

Graduate Student Competition I

Chair: D. E. Franke, LSU Agricultural Center

Monday 10:15 - Noon

Lime

- 9 10:15 AM Effects of age at castration and transportation stress on physiological responses of newly weaned beef calves. J. S. Thurlow*¹, M. L. Looper², S. T. Reiter¹, M. A. Lamb¹, and C. F. Rosenkrans Jr.¹, ¹University of Arkansas, Fayetteville, ²USDA-ARS Dale Bumpers Small Farm Research Center, Booneville, AR.
- 10 10:30 AM The effect of supplementation frequency and transportation stress on performance and health of newly weaned calves. C. Pickworth*, G. Scaglia, W. Swecker, J. Fontenot, and M. Wahlberg, Virginia Tech, Blacksburg.
- 11 10:45 AM Population dynamics of Eimeria spp in grazing beef calves in Virginia. A. Lucas*¹, W. Swecker¹, G. Scaglia², D. Lindsay¹, F. Elvinger¹, J. Fontenot², and A. Zajac¹, ¹Virginia-Maryland Regional College of Veterinary Medicine, Blacksburg, VA, ²Virginia Tech, Blacksburg.
- 12 11:00 AM The effects of acute restraint stress on lymphocyte proliferation and IgM production and cortisol levels in the pig. N. C. Burdick*¹, T. H. Welsh, Jr.², J. A. Carroll³, and J. C. Laurenz¹, ¹Texas A&M University, Kingsville, ²Texas A&M University, College Station, ³USDA-ARS Livestock Issues Research Unit, Lubbock, TX.
- 13 11:15 AM Cow and calf performance in two years on Coastal or Tifton 85 pastures with aeschynomene creep grazing. V. A. Corriher*¹, G. M. Hill¹, J. G. Andrae², M. A. Froetschel², and B. G. Mullinix, Jr.¹, ¹University of Georgia, Tifton, ²University of Georgia, Athens.
- 14 11:30 AM Adaptation of lambs to an endophyte-infected tall fescue seed diet. R. A. Zinner*, D. G. Ely, D. K. Aaron, L. P. Bush, A. K. Lunsford, and M. L. Mallory, University of Kentucky, Lexington.
- 15 11:45 AM Copper deficiency results in decreased brain copper but does not affect brain prion protein characteristics in mature Angus cows. L. R. Legleiter*, J. W. Spears, K. E. Lloyd, S. L. Hansen, and R. S. Fry, North Carolina State University, Raleigh.

Graduate Student Competition II

Chair: D. E. Franke,

LSU Agricultural Center

Monday 1:00 - 3:15

Lime

- 16 1:00 PM Effect of anabolic implants on beef carcass quality and yield, and factors regulating tenderness in Longissimus and Gluteus muscles. J. Long*, S. Duckett, E. Pavan, and H. Crowe, University of Georgia, Athens.

- 17 1:15 PM Forage quality, animal performance, and carcass traits of steers finished on winter annual ryegrass (*Lolium multiflorum* Lam.) pasture with varying levels of corn supplementation. S. Roberts*, C. Kerth, K. Braden, D. Rankins, L. Kriese-Anderson, and J. Prevatt, Auburn University, Auburn, AL.
- 18 1:30 PM Finishing steers on winter annual ryegrass (*Lolium multiflorum* Lam.) with varied levels of supplementation: Effects on fatty acid profile, shelf life and lipid stability. K. Braden*¹, K. William³, S. Roberts¹, J. Gentry², and C. Kerth¹, ¹Auburn University, Auburn, AL, ²Middle Tennessee State University, Mufreesboro, ³Tuskegee University, Tuskegee, AL.
- 19 1:45 PM Serum concentration comparisons of thyroxine, insulin-like growth factor-1 and leptin in foaling mares of fat versus moderate condition. C. Cavinder*, M. Vogelsang, P. Gibbs, D. Forrest, and B. Scott, Texas A&M University, College Station.
- 20 2:00 PM Fertility associated antigen (FAA) in peripubertal beef bulls as an indicator of potential fertility. J. Gallino*¹, A. Novosad¹, G. Dawson², R. Ax², L. Sprott¹, and D. Forrest¹, ¹Texas A&M University, College Station, ²University of Arizona, Tucson.
- 21 2:15 PM The effects of dietary fat supplementation on body composition traits and reproductive efficiency of beef heifers grazing ryegrass pastures. A. R. Dos Santos*^{1,2}, S. T. Willard², R. C. Vann¹, and B. Macoon¹, ¹Brown Loam Experiment Station, Raymond, MS, ²Mississippi State University, Starkville.
- 22 2:30 PM Effects of supplement type on performance, reproductive and physiological parameters of yearling Brahman-crossbred heifers. R. F. Cooke*^{1,2}, C. R. Staples², G. C. Lamb³, and J. D. Arthington¹, ¹University of Florida - RCREC, Ona, ²University of Florida - Animal Sciences, Gainesville, ³University of Minnesota - Animal Sciences, Grand Rapids.
- 23 2:45 PM Effects of body condition and bovine somatotropin on estrus, ovarian follicles, and reproductive performance of postpartum Brahman-influenced cows. R. Flores*¹, M. L. Looper², R. W. Rorie¹, C. F. Rosenkrans, Jr.¹, M. A. Lamb¹, S. T. Reiter¹, and D. L. Kreider¹, ¹University of Arkansas, Fayetteville, ²USDA-ARS, Dale Bumpers Small Farms Research Center, Booneville, AR.
- 24 3:00 PM Effect of liquid-molasses supplements containing catfish oil on beef cow performance and reproductive efficiency. D. Holley*, M. Hersom, and J. Yelich, University of Florida, Gainesville.

Breeding and Genetics

Chair: Jackson M. Dzakuma,
Prairie View A&M University
Monday 1:00 - 2:15
Largo

- 25 1:00 PM Heritability and EPD for calving rate and calf survival in a multi-breed population. J. L. Guerra, D. E. Franke*, and D. C. Blouin, LSU Agricultural Center, Baton Rouge, LA, US.
- 26 1:15 PM Comparison of traits of pure and crossbred calves produced by Brooksville Angus sires and sires from prominent Angus bloodlines. D. G. Riley*¹, C. C. Chase, Jr.¹, S. W. Coleman¹, and T. A. Olson², ¹USDA, ARS, Brooksville, FL, ²Univ. Florida, Gainesville.
- 27 1:30 PM Evaluation of Romosinuano as straightbreds and crossbreds with Angus and Brahman: postweaning growth and temperament traits of heifers. J. Spatz*, D. Riley, C. Chase, S. Coleman, and T. Olson, University of Florida, Gainesville.
- 28 1:45 PM Relationships of milk production in Brangus cows to postweaning calf performance. X. Wang¹, M. Brown*², F. Gao¹, J. Wu¹, and H. Mayeux², ¹Gansu Agricultural University, Lanzhou, Gansu, PRC, ²USDA-ARS, Grazinglands Research Laboratory, El Reno, OK.
- 29 2:00 PM Effects of artificially administered nematode challenge on three breeds of goats. E. A. Wilson*¹, J. M. Dzakuma¹, N. C. Beckford¹, B. M. Johnson¹, L. C. Nuti¹, and T. M. Craig², ¹Prairie View A&M University, Prairie View, TX, ²Texas A&M University, College Station.

Physiology I: Heat Stress Symposium

Chair: Dr. Rhonda Vann,
MAFES-Brown Loam Exp. Station
Monday 1:00 - 5:00
Orange

- 1:00 PM Introduction. Dr. Rhonda Vann.
- 30 1:05 PM Direct effects of thermal stress (TS) on gene expression in growing bovine mammary epithelial cells (BMEC) in collagen gel culture. R. Collier*, C. Stiening, J. Hoying, A. Hoying, and M Abdallah, University of Arizona, Tucson.
- 31 1:50 PM Determinants of oocyte and embryonic resistance to elevated temperature in cattle - mechanisms and opportunities for exploitation to increase pregnancy rates during heat stress. P. J. Hansen*, University of Florida, Gainesville.
- 32 2:25 PM Prediction of heat stress conditions in cattle using current technology to monitor thermal status. D. Spiers*, University of Missouri, Columbia.
- 3:00 PM Break.

- 33 3:15 PM Indicators of heat stress and environmental monitoring of animal responses. S. Willard*, Mississippi State University, Mississippi State.
- 34 3:45 PM A history of the evaluation of the Slick hair gene. T. Olson*¹, C. Chase², M. Mariasegaram², C. Lucena¹, and E. Godoy¹, ¹University of Florida, Gainesville, ²USDA,ARS, Subtropical Agricultural Research Station, Brooksville, FL.
- 35 4:15 PM Studies on genetics of heat tolerance in Holsteins. I. Misztal*, J. Bohmanova, M. Freitas, and S. Tsuruta, University of Georgia, Athens.
- 4:45 PM Questions & Discussion.

Ruminant Animal Production I: Health and Reproduction

Chair: Les Anderson, University of Kentucky
Monday 1:00 - 4:15
Siesta/Biscayne

- 36 1:00 PM The effects of cracking whole cottonseed on apparent nutrient digestibilities and N retention when fed to goats. B. Hagens*¹, N. Whitley², and B. Rude¹, ¹Mississippi State University, Starkville, ²University of Maryland Eastern Shore, Princess Anne,.
- 37 1:15 PM Evaluation of a spinosad pour-on insecticide on the effectiveness and efficacy for horn fly (*Haematobia irritans*) control and management on beef cattle. L. A. Rakowitz*, S. F. Kelley, M. M. Beverly, and R. D. Hanagriff, Sam Houston State University, Huntsville, TX.
- 38 1:30 PM Plane of nutrition by tick burden interaction in cattle: Effect on body weight, dry matter intake, and plasma IGF-1. J. Gallino*, D. Tolleson, T. Welsh, L. Jonovich, G. Carstens, P. Teel, O. Strey, S. Prince, K. Dean, and J. Stuth, Texas A&M University, College Station.
- 39 1:45 PM Plane of nutrition by tick burden interaction in cattle: Effect on fecal composition. S. Prince*, D. Tolleson, J. Gallino, K. Banik, P. Teel, O. Strey, G. Carstens, T. Welsh, K. Dean, and J. Stuth, Texas A&M University, College Station.
- 40 2:00 PM Effect of breed on acute phase protein response to weaning and transport in beef calves. X. Qiu*¹, J. Arthington¹, D. Riley², C. Chase Jr.², W. Phillips², and S. Coleman², ¹University of Florida, Ona, ²USDA-ARS, USA.
- 41 2:15 PM Effects of dexamethasone, and selenium and vitamin E on heat shock protein concentrations and lactate dehydrogenase activity in immune challenged steers consuming tall fescue baleage. S. Reiter*, M. Nihsen, D. Kreider, Z. Johnson, and C. Rosenkrans, Jr, University of Arkansas, Fayetteville.
- 42 2:30 PM Effects of on-arrival vs. delayed BRD vaccination on health, performance and serum IBR titer levels of newly-received stocker cattle. J. T. Richeson*¹, P. A. Beck¹, S. A. Gunter¹, M. S. Gadberry¹, D. S.

Hubbell¹, and C. Jones², ¹University of Arkansas Division of Agriculture, Fayetteville, ²Boehringer-Ingelheim Vetmedica, Inc., Ridgefield, CT.

- 43 2:45 PM Effect of cation-anion difference on measures of acid-base physiology in beef cows. M. Hersom*¹, G. Hansen², and J. Arthington³, ¹University of Florida, Gainesville, ²North Florida Research and Education Center, University of Florida, Marianna, FL, ³Range Cattle Research and Education Center, University of Florida, Ona, FL.
- 44 3:00 PM Effects of Tasco® in free-choice mineral on beef cow performance. J. Gentry*¹, D. Colling², and W. Gill³, ¹Middle Tennessee State University, Murfreesboro, ²Acadian Agritech, Dartmouth, Nova Scotia, Canada, ³University of Tennessee, Knoxville.
- 45 3:15 PM Effect of supplement timing on blood measurements and reproductive performance of beef heifers grazing annual ryegrass in the spring. D. Kreider¹, K. Coffey*¹, T. Montgomery², K. Ferrell¹, W. Coblentz¹, W. Whitworth², J. Caldwell¹, R. McNew¹, and R. Ogden¹, ¹University of Arkansas, Fayetteville, ²Univ. of Arkansas SE Research and Extension Center, Monticello, AR.
- 46 3:30 PM Effect of dietary manganese source and concentration on growth, reproductive performance, and manganese status of beef heifers. S. L. Hansen*, C. S. Whisnant, K. E. Lloyd, and J. W. Spears, North Carolina State University, Raleigh.
- 47 3:45 PM Effects of conventional or low bull to female ratio in extensively-managed, natural mating breeding groups. R. J. Rathmann*¹, L. R. Sprott¹, J. W. Holloway², K. S. Barling¹, B. G. Warrington², K. O. Curley, Jr.¹, and D. W. Forrest¹, ¹Texas A&M University, College Station, ²Texas Agricultural Experiment Station, Uvalde, TX.
- 48 4:00 PM Utilization of reproductive tract scores in extensively-managed, natural mating breeding groups. R. J. Rathmann*¹, L. R. Sprott¹, J. W. Holloway², K. S. Barling¹, B. G. Warrington², K. O. Curley, Jr.¹, and D. W. Forrest¹, ¹Texas A&M University, College Station, ²Texas Agricultural Experiment Station, Uvalde, TX.

Pastures and Forages I

Chair: Warren Gill, University of Tennessee

Monday 1:15 - 2:15

Cocoa

- 49 1:15 PM Effects of ruminal fill on short-term herbage intake rate. P. Gregorini*^{1,2}, S. Gunter¹, C. Masino², and P. Beck¹, ¹University of Arkansas Division of Agriculture, Hope, ²Universidad Nacional de La Plata, La Plata, Argentina.
- 50 1:30 PM The effects of a morning fasting on the evening grazing behavior of beef heifers. P. Gregorini*^{1,2}, M. Eirin², M. Wade³, R. Refi², M. Ursino², O. Ansin², and S. Gunter², ¹University of Arkansas Division of Agriculture, Hope, ²Universidad

Nacional de La Plata, La Plata, Buenos Aires, Argentina, ³Universidad del Centro de la Provincia de Buenos Aires, Tandil, Buenos Aires, Argentina.

- 51 1:45 PM The effect of fasting on the feeding station behavior of grazing beef heifers. M. Wade¹, M. Eirin², and P. Gregorini^{*2,3}, ¹Universidad del Centro de la Provincia de Buenos Aires, Tandil, Buenos Aires, Argentina, ²Universidad Nacional de La Plata,, La Plata, Buenos Aires, Argentina, ³University of Arkansas Division of Agriculture, Hope.
- 52 2:00 PM The effect of morning fasting on beef heifers weight gain, body condition score and daily herbage intake. M. Eirin², P. Gregorini^{*1,2}, R. Refi¹, M. Ursino¹, O. Ansin¹, and S. Gunter¹, ¹University of Arkansas Division of Agriculture, Hope, Hope, ²Universidad Nacional de La Plata, La Plata, Buenos Aires, Argentina.

Pastures and Forages II

Chair: John Arthington, University of Florida

Monday 2:30 - 3:30

Cocoa

- 53 2:30 PM Limit-grazing of winter wheat pasture to increase stocker productivity. W. A. Phillips^{*1}, S. W. Coleman², D. G. Riley², C. C. Chase, Jr.², and H. S. Mayeux¹, ¹USDA-ARS Grazinlands Research Laboratory, El Reno, OK, ²USDA-ARS Subtropical Agricultural Research Station, Brooksville, FL.
- 54 2:45 PM Performance of beef heifers strip-grazing stockpiled endophyte infected, non-toxic endophyte infected and endophyte free tall fescue. M. E. Drewnoski^{*}, E. J. Oliphant, M. H. Poore, J. T. Green, and M. E. Hockett, North Carolina State University, Raliegh.
- 55 3:00 PM Effects of brown midrib gene in sudangrass (sorghum bicolor) on summer stocker steers performance. J. R. Parish^{*1}, R. H. Watson¹, T. F. Best², J. A. Parish¹, R. R. Evans², and W. B. McKinley¹, ¹Mississippi State Univesity, Mississippi State, ²MAFES Prairie Research Station, Prairie, MS.
- 56 3:15 PM Forage chicory as an alternative to annual ryegrass in stocker cattle production systems. R. H. Watson^{*}, J. R. Parish, M. B. Howell, J. A. Parish, W. B. McKinley, and W. L. Newman, Mississippi State Univesity, Mississippi State.

ASAS Southern Section Business Meeting and Awards

Monday 5:00 - 7:00

Orange

Small Ruminant Subcommittee of the NAGP Meeting

Monday 7:00 - 9:00

Palms Ballroom Salon B

Tuesday, February 7

Meats I

Chair: Jason K. Apple, University of Arkansas

Tuesday 8:00 - 9:30

Tangerine B

- 57 8:00 AM Price premiums and discounts for retail marketing attributes of flat iron steak. S. Watson*¹, E. Tucker¹, and D. Hudson², ¹Louisiana Tech University, Ruston, ²Mississippi State University, Mississippi State.
- 58 8:15 AM Empirical modeling for predicting objective tenderness of biceps femoris steaks. J. T. Sawyer*, J. K. Apple, J.-F. Mullenet, B. Cheatman, W. K. Chung, R. Xiong, and J. Kandaswamy, University of Arkansas, Fayetteville.
- 59 8:30 AM Effects of beef muscle type, with or without enhancement on pre-cooked value-added roast beef. J. Martin* and B. Williams, Mississippi State University, Mississippi State.
- 60 8:45 AM Comparison of raw soybean and soybean meal diets on carcass traits of gilts. D. Sykes*, S. Couvillion, J. Martin, T. Althen, P. Gerard, M. Crenshaw, and P. Ryan, Mississippi State University, Mississippi State.
- 61 9:00 AM Effects of dietary fat source and slaughter weight on LM fatty acid composition of growing-finishing swine. M. S. Lee*, J. K. Apple, C. V. Maxwell, D. L. Galloway, J. T. Sawyer, and J. W. S. Yancey, University of Arkansas, Fayetteville.
- 62 9:15 AM Effects of dietary fat source and slaughter weight on the fatty acid composition of carcass composition samples from growing-finishing swine. J. W. S. Yancey*, J. K. Apple, C. V. Maxwell, D. L. Galloway, J. T. Sawyer, and M. S. Lee, University of Arkansas, Fayetteville.

Small Ruminant Production

Chair: Sam Jackson, Texas Tech University

Tuesday 8:00 - 12:15

Siesta/Biscayne

- 63 8:00 AM Use of multiple boluses of copper oxide wire particles for control of *Haemonchus contortus* in lambs. J. Burke*¹ and J. Miller², ¹USDA, Agricultural Research Service, Booneville, AR, ²Louisiana State University, Baton Rouge.
- 64 8:15 AM Effect of copper oxide needles on gastrointestinal parasites in weanling meat goats control-grazed on bermudagrass pastures. J.-M. Luginbuhl*, H. Glennon, and J. Mueller, North Carolina State University, Raleigh.
- 65 8:30 AM Control of *Haemonchus contortus* in ewes and does with a sustained-release multi-trace element/vitamin ruminal bolus. J. Burke*¹ and J. Miller², ¹USDA, Agricultural Research Service,

Booneville, AR, ²Louisiana State University, Baton Rouge.

- 66 8:45 AM Teaching integrated parasite management (IPM) to sheep and goat producers. S. Schoenian*, University of Maryland Cooperative Extension, Keedysville, MD.
- 67 9:00 AM Crude protein of diet and feces in goats: Forward and reverse process prediction via near infrared reflectance spectroscopy. R. Dittmar*¹, D. Tolleson¹, S. Prince¹, K. Banik¹, J. Gallino¹, U. Gombosuren², and J. Stuth¹, ¹Texas A&M University, College Station, ²Mercy Corps, Ulaan Baator, Mongolia.
- 68 9:15 AM Fermented fruit residues inclusion on ram's diet: Effects on voluntary intake and nutrients digestibility. S. Pagán*¹, A. Rodríguez¹, and E. Valencia², ¹Animal Industry Department, University of Puerto Rico at Mayagüez, Mayagüez, Puerto Rico, ²Agronomy and Soil Sciences Department, University of Puerto Rico at Mayagüez, Mayagüez, Puerto Rico.
- 69 9:30 AM Forage intake in Suffolk, Katahdin, and reciprocal-cross lambs. F. Gao¹, M. Brown*², X. Wang¹, J. Wu¹, P. Starks², and H. Mayeux², ¹Gansu Agricultural University, Lanzhou, Gansu, PRC, ²USDA-ARS, Grazinglands Research Laboratory, El Reno, OK.
- 70 9:45 AM Fibrolytic enzymes on intake and digestibility of guineagrass (*Panicum Maximum* Jacq.) hay. K. Tous*¹, A. Rodríguez¹, A. Adesogan², and E. Valencia¹, ¹University of Puerto Rico, Mayagüez, Puerto Rico, ²University of Florida, Gainesville.
- 71 10:00 AM Weight gain in meat goat does fed endophyte-infected and non-infected tall fescue. R. Browning, Jr.*¹, P. Pandya, T. Payton, B. Donnelly, W. Hendrixson, and M. Byars, Tennessee State University-IAgER, Nashville.
- 72 10:15 AM In situ dry matter degradability of tropical legumes using fistulated goats and steers. S. Pagán*¹, E. M. Valencia², J. P. Muir³, and A. A. Rodríguez¹, ¹Department of Animal Industry, University of Puerto Rico at Mayagüez, Mayagüez, Puerto Rico, ²Department of Agronomy and Soil Sciences University of Puerto Rico at Mayagüez, Mayagüez, Puerto Rico, ³Texas Agricultural Experiment Station, Stephenville, TX.
- 73 10:30 AM The effect of time of day of supplemental feeding on production traits of lactating hair sheep in the tropics. R. W. Godfrey* and M. C. Vinson, Agricultural Experiment Station, University of the Virgin Islands, St Croix, VI.
- 74 10:45 AM Use of transrectal ultrasonography to determine early fetal development in meat goat does and hair sheep ewes. S. Wildeus*, J. R. Collins, and E. J. Chozu, Virginia State University, Petersburg.
- 75 11:00 AM Collection and freezing of Angora goat embryos for the USDA Animal Germplasm Repository. J. McAllister*¹, S. Bushnell¹, M. Purpera¹, A. Landry¹, B. Olcott¹, H. Blackburn², E. Loetz³, K. Bondioli¹, and R. Godke¹, ¹Louisiana State University

Agricultural Center, Baton Rouge, LA, ²USDA National Center for Genetics Resources Preservation, Ft. Collins, CO, ³E. de la Garza American Institute for Goat Research, Langston, OK.

- 76 11:15 AM Effect of photoperiod on milk yield and quality, and reproduction in dairy goats. R. Garcia-Hernandez*, A. Parks, J. Dzakuma, G. Newton, S. Horner, and L. Nuti, International Goat Research Center, Prairie View A&M University, Prairie View, TX.
- 77 11:30 AM Doe-kid performance to weaning among three meat goat breeds (Year 2). R. Browning, Jr.*, B. Donnelly, T. Payton, P. Pandya, W. Hendrixson, and M. Byars, Tennessee State University-IAgER, Nashville.
- 78 11:45 AM Ewe productivity in a grading-up mating scheme designed to remove wool from a traditional breed. D. K. Aaron*, D. G. Ely, E. Fink, and R. A. Zinner, University of Kentucky, Lexington.
- 79 12:00 PM Factors affecting the decision to exit the sheep industry: A three stage regression analysis for producers in West Virginia. D. Singh-Knights*, D. Smith, and M. Knights, West Virginia University, Morgantown.

Extension I: NCBA, "Meeting the Media"

Beef Check-Off Sponsored

Chair: J. T. Johns, University of Kentucky

Tuesday 8:30 - 11:30

Orange

- 8:30 AM Meeting the Media.
This session will provide training on how educators that work with the livestock industry can more effectively and comfortably react to requests from the media for interviews and more effectively be in control of the situation. We are recognized as authorities and leaders of the animal industry and are often the first people contacted when a crisis occurs in the industry. Presented by the NCBA on behalf of America's beef producers through the beef check-off.

Physiology II

Chair: Dr. John Hall, Virginia PolyTech Institute

Tuesday 8:30 - 11:15

Marathon & Cedar

- 80 8:30 AM Antibody response in porcine colostrum with specificity to enterotoxigenic E. coli. J. Allen* and A. Byers, North Carolina A&T State University, Greensboro.
- 81 8:45 AM Enterotoxigenic Escherichia Coli infections from neonatal swine. J. Allen* and A. Byers, North Carolina A&T State University, Greensboro.
- 82 9:00 AM Validation of an automated tracking system to quantify overall activity and maintenance behaviors of individually housed nursery pigs. J.

W. Dailey*¹, N. Krebs², J. A. Carroll¹, and J. J. McGlone², ¹Livestock Issues Research Unit, Agricultural Research Service-USDA, Lubbock, TX, ²Texas Tech University, Lubbock.

- 83 9:15 AM Photonic properties of transformed Salmonella typhimurium: Plasmid stability and concentration dependency. E. Williams*¹, K. Moulton¹, D. Moore¹, M. McGee¹, F. Lovell¹, S. Couvillion¹, P. Ryan¹, D. Lay², and S. Willard¹, ¹Mississippi State University, Mississippi State, ²USDA-ARS, Livestock Behavior Research Unit, West Lafayette, IN.
- 84 9:30 AM Evaluation of non-nutrient additives as immunomodulators in nursery pigs. J. Carroll*¹ and K. Haydon², ¹Livestock Issues Research Unit, Agricultural Research Service-USDA, Lubbock, TX, ²Prince Agri Products, Inc., Quincy, IL.
- 9:45 AM Break.
- 85 10:00 AM Reproduction in gilts fed a diet supplemented with a source of omega-3 polyunsaturated fatty acids. M. Estienne and A. Harper*, Virginia Polytechnic Institute and State University, Blacksburg.
- 86 10:15 AM Training of young boars to mount an artificial sow and allow semen collection is expedited by treatment with Lutalyse. M. Estienne*, A. Harper, and R. Crawford, Virginia Polytechnic Institute and State University, Blacksburg.
- 87 10:30 AM Bioluminescence imaging and hormonal profiles in late gestation ewes following intra-uterine inoculation with lux-modified Escherichia coli. K. Moulton*¹, S. Willard¹, P. Ryan¹, D. Christiansen¹, C. Klauser², and W. Bennett², ¹Mississippi State University, Mississippi State, ²University of Mississippi Medical School, Jackson.
- 88 10:45 AM Regulation of the GnRH receptor promoter by estradiol 17-B is revealed using adenoviral mediated gene transfer and cultured pituitary cells. C. A. Lents*, J. D. Cantlon, T. M. Nett, and C. M. Clay, Colorado State University, Fort Collins.
- 89 11:00 AM Efficacy of production drugs to assist in herd-health upgrades. D. Bishop*¹ and T. Orban², ¹Reproductive Design Services, Garland, NC, ²Prestage Farms, Clinton, NC.

**Extension Luncheon
Tuesday Noon - 2:00
Oleander B**

Meats II: Pre-harvest Food Safety Symposium
Chair: Jason K. Apple, University of Arkansas
Tuesday 1:00 - 5:00
Orange

- 90 1:00 PM Research examining seasonal shedding of E. coli O157:H7. T. Edrington*, T. Callaway, K. Genovese, R. Anderson, and D. Nisbet, USDA-ARS Food and Feed Safety Research Laboratory, College Station, TX.

- 91 1:30 PM Does endophyte-infected tall fescue affect the prevalence of *E. coli* O157:H7 and *Salmonella* in the feces of ruminants? M. L. Loofer*¹, T. S. Edrington², R. Flores³, G. E. Aiken⁴, and C. F. Rosenkrans, Jr.³, ¹USDA-ARS, Dale Bumpers Small Farms Research Center, Booneville, AR, ²USDA-ARS, Food and Feed Safety Research Unit, College Station, TX, ³University of Arkansas, Fayetteville, ⁴USDA-ARS, Forage-Animal Production Research Unit, Lexington, KY.
- Food borne pathogens associated with feedlot cattle.
- 2:00 PM Mindy Brashears, Texas Tech University.
- 2:30 PM Guy Lonergan, West Texas A&M University.
- 3:00 PM Roundtable discussion.

Physiology III

Chair: Dr. Rhonda Vann, MAFES-Brown Loam Exp. Station
 Tuesday 1:00 - 4:45
 Marathon & Cedar

- 92 1:00 PM Effects of melengestrol acetate (MGA) supplementation on pregnancy rate to artificial insemination in dairy heifers. D. Kreider*, R. Rorie, C. Rosenkrans, W. Coblenz, and T. Lester, University of Arkansas, Fayetteville.
- 93 1:15 PM Line and sex association between postweaning serum insulin-like growth factor-I (IGF-I) concentrations and growth traits of Angus cattle divergently selected for serum IGF-I concentration. M. Pagan*¹, M. E. Davis², R. C. M. Simmen³, N. E. Raney⁴, and C. W. Ernst⁴, ¹University of Puerto Rico, Mayaguez, Puerto Rico, ²The Ohio State University, Columbus, ³University of Arkansas for Medical Sciences, Little Rock, ⁴Michigan State University, East Lansing.
- 94 1:30 PM Line and sex association between serum insulin-like growth factor binding proteins (IGFBP) and growth traits of Angus cattle divergently selected for serum IGF-I concentration. M. Pagan*¹, M. E. Davis², R. C. M. Simmen³, N. E. Raney⁴, and C. W. Ernst⁴, ¹University of Puerto Rico, Mayaguez, Puerto Rico, ²The Ohio State University, Columbus, ³University of Arkansas for Medical Sciences, Little Rock, ⁴Michigan State University, East Lansing.
- 95 1:45 PM Effect of body condition on plasma concentrations of IGF-I in postpartum beef cows treated with somatotropin. M. J. Prado-Cooper*, I. Rubio, M. P. Davis, N. M. Long, R. P. Wettemann, and L. J. Spicer, Oklahoma State University, Stillwater.
- 96 2:00 PM Effect of prenatal nutrition of calves on postpartum growth and plasma insulin and IGF-1. N. M. Long*, M. P. Davis, M. J. Prado-Cooper, and R. P. Wettemann, Oklahoma Agricultural Experiment Station, Stillwater, OK.
- 2:15 PM Break.

- 97 2:30 PM Relationships of cattle temperament and physiologic responses to handling during typical management situations. K. O. Curley, Jr.¹, C. E. Schuehle Pfeiffer¹, D. A. King¹, J. W. Savell¹, R. C. Vann², T. H. Welsh, Jr.¹, and R. D. Randel³, ¹Texas Agricultural Experiment Station, College Station, TX, ²Brown Loam Experiment Station, Raymond, MS, ³Texas Agricultural Experiment Station, Overton, TX.
- 98 2:45 PM Relationship of temperament with immunization response and lymphocyte proliferation in Brahman bulls. R. Oliphint¹, N. Burdick², J. Laurenz², K. Curley¹, R. Vann³, R. Randel¹, and T. Welsh¹, ¹Texas Ag Experiment Station, Overton, TX, ²Texas A&M University, Kingsville, ³Mississippi State University, Brown Loam.
- 99 3:00 PM Relationships between heifer temperament indices and fecal immunoreactive corticoid determinations. M. McGee¹, K. Curley², R. Randel², D. Neuendorff², T. Welsh³, A. Musselwhite¹, K. Kelly-Quagliana¹, and S. Willard¹, ¹Mississippi State University, Mississippi State, ²Texas Agricultural Experiment Station, Overton, TX, ³Texas Agricultural Experiment Station, College Station, TX.
- 100 3:15 PM Effects of parity and once daily suckling on follicular dynamics in postpartum Brahman. J. Ramirez III^{*}, D. A. Neuendorff, A. W. Lewis, and R. D. Randel, Texas Agricultural Experiment Station, Overton, TX.
- 101 3:30 PM Effects of early and late fall calving on reproductive performance and weaning weights of calves. M. P. Davis^{*}, D. W. Kastner, I. Rubio, N. M. Long, and R. P. Wettemann, Oklahoma Agricultural Experiment Station, Stillwater, OK.
- 3:45 PM Break.
- 102 4:00 PM Effectiveness of CIDR-based estrous synchronization systems for natural service and AI in replacement heifers. J. B. Hall^{*}, W. D. Whittier, J. C. Wuenschel, and R. Kasimanickam, Virginia Tech, Blacksburg.
- 103 4:15 PM Effectiveness of Estrumate vs. Prostamate in GnRH/CIDR + PG synchronization protocols in lactating *Bos taurus* x *Bos indicus* beef cows. R. Esterman^{*}, B. Austin, S. Woodall, and J. Yelich, University of Florida, Gainesville.
- 104 4:30 PM Evaluation of follicular development in Brangus and Angus heifers receiving a 14 d melengestrol acetate (MGA[®]) treatment with PG 19 d later. S. Woodall^{*}, B. Austin, R. Esterman, and J. Yelich, University of Florida, Gainesville.

**Ruminant Animal Production II:
Growth and End Product**
Chair: Jerry Spears, North Carolina
State University
Tuesday 1:00 - 5:00
Tangerine B

- 105 1:00 PM Tall fescue type effect on backgrounded calf health and performance. C. Pickworth*, G. Scaglia, W. Swecker, J. Fontenot, M. Wahlberg, and O. Abaye, Virginia Tech, Blacksburg.
- 106 1:15 PM Effect of hay quality on performance of growing beef calves limit fed total mixed rations. P. Beck*, S. Hutchison, B. Stewart, S. Gunter, and M. Phillips, University of Arkansas, Hope.
- 107 1:30 PM Effect of applying ammonia or fibrolytic enzymes to bermudagrass hay on feed intake, digestion kinetics and growth of beef steers. N. K. Krueger*, A. T. Adesogan, C. R. Staples, W. K. Krueger, L. E. Sollenberger, and R. C. Littel, University of Florida, Gainesville.
- 108 1:45 PM Winter rye pasture based production programs for growing beef cattle. K. Hales*², E. Whitley¹, and G. Horn², ¹The Noble Foundation, Ardmore, OK, ²Oklahoma Agricultural Experiment Station, Stillwater, OK.
- 109 2:00 PM Effects of feeding molasses based supplements on the performance of calves in a preconditioning program. B. Austin*, M. Hersom, and T. Thrift, University of Florida, Gainesville.
- 110 2:15 PM Corn gluten feed as a diet ingredient for Senepol- or Angus-sired finishing steers. M. Poore*, J. Cassady, and G. Benson, North Carolina State University, Raleigh.
- 111 2:30 PM Pigeon pea digestibility and utilization by growing beef calves. G. M. Hill*, S. C. Phatak, and B. G. Mullinix, Jr., University of Georgia, Tifton.
- 112 2:45 PM Effects of supplemental energy source on adipose tissue accretion in stocker steers grazing ryegrass pastures. E. K. Bumpus*¹, J. E. Sawyer¹, T. D. A. Forbes², B. G. Warrington², and J. W. Holloway², ¹Texas A&M University, College Station, ²Texas Agricultural Experiment Station, Uvalde, TX.
- 113 3:00 PM Selenium, zinc, and copper status in growing cattle grazing winter pasture on the Coastal Plain. S. A. Gunter*¹, J. W. Finley², C. B. Stewart¹, S. Hutchison¹, and P. A. Beck¹, ¹University of Arkansas, Hope, ²USDA-ARS Grand Forks Human Nutrition Laboratory, Grand Forks, ND.
- 114 3:15 PM An evaluation of breeding soundness exam administration on subsequent ultrasound body composition traits in yearling beef bulls. R. C. Vann*¹, J. A. Parish², W. B. McKinley², B. J. White², and S. T. Willard², ¹MAFES-Brown Loam Experiment Station, Raymond, MS, ²Mississippi State University, Mississippi State.
- 115 3:30 PM Use of blood metabolites at weaning as predictors of beef carcass traits. Z. Johnson¹, J. May¹, R.

Dollar¹, C. Golden¹, M. Nihsen¹, K. May², M. Looper³, and C. Rosenkrans, Jr.*¹, ¹University of Arkansas, Fayetteville, ²Caldwell Farms, Rosebud, AR, ³USDA-ARS, Dale Bumpers Small Farms Research Center, Booneville, AR.

- 116 3:45 PM Effects of different growing systems on rate of accretion of intramuscular and subcutaneous adipose tissue in feedlot cattle. J. T. Vasconcelos*^{1,3}, J. E. Sawyer¹, L. W. Greene², F. T. McCollum³, and S. B. Smith¹, ¹Texas A&M University, College Station, ²Auburn University, Auburn, AL, ³Texas A&M University Agricultural Research and Extension Center, Amarillo, TX.
- 117 4:00 PM Evaluation of feeder calf grade, background information and health status on feedlot weight gain and carcass traits of calves fed in South Texas. D. W. Groeschke¹, A. D. Herring*¹, J. E. Sawyer¹, and J. C. Paschal^{1,2}, ¹Texas A&M University, College Station, ²Texas Cooperative Extension, Corpus Christi.
- 118 4:15 PM Use of ultrasound in combination with calf background information to predict beef carcass traits. D. T. Dean¹, A. D. Herring*¹, J. E. Sawyer¹, and D. S. Hale^{2,1}, ¹Texas A&M University, College Station, ²Texas Cooperative Extension, College Station.
- 119 4:30 PM Growing program, breed, and gender influence ultrasound-based prediction accuracy for carcass marbling and fat thickness in crossbred beef cattle. J. E. Sawyer*¹, A. D. Herring¹, D. K. Lunt^{1,2}, D. T. Dean¹, R. D. Rhoades¹, and D. G. Riley³, ¹Texas A&M University, College Station, ²McGregor Agricultural Research Center, McGregor, TX, ³USDA Subtropical Agricultural Research Station, Brooksville, FL.
- 120 4:45 PM Meta analysis of residual feed intake with and without adjustment for carcass composition in growing and finishing calves. E. G. Brown*¹, L. O. Tedeschi¹, G. E. Carstens¹, P. A. Lancaster¹, D. G. Fox², T. D. A. Forbes¹, R. D. Randel¹, T. H. Welsh¹, and F. M. Rouquette¹, ¹Texas Agricultural Experiment Station, College Station, TX, ²Cornell University, Ithaca, NY.

Extension II

Chair: J. D. Arthington, University of Florida
Tuesday 2:15 - 4:15
Siesta/Biscayne

- 121 2:15 PM Combining internet course work with practical experience for the training of new agents in animal science curriculum. T. R. Troxel*, B. L. Barham, M. S. Gadberry, S. M. Jones, J. A. Jennings, J. G. Powell, B. R. Kutz, J. T. Richeson, and R. Poling, University of Arkansas Cooperative Extension Service, Little Rock.
- 122 2:30 PM Extension mediated disaster relief response to beef cattle producers stricken by hurricanes katrina and rita. J. Rowntree*¹, J. Parish², and W. McKinley², ¹Louisiana State University Agricultural Center, Baton Rouge, ²Mississippi State University, Mississippi State.

- 123 2:45 PM Assessing injectable mineral regimens for feeder cattle. A. E. Fisher, W. W. Gill*, C. D. Lane, F. M. Hopkins, and R. L. Ellis, University of Tennessee, Knoxville.
- 124 3:00 PM Evaluation of Co-Ral Plus fly tagging system. A. E. Fisher, C. D. Lane*, W. W. Gill, F. M. Hopkins, F. D. Kirkpatrick, and R. L. Ellis, University of Tennessee, Knoxville.
- 125 3:15 PM Evaluation of body condition scores of cows wintered with a stockpiled bermudagrass + ryegrass system or traditional hay only system. J. Cleere*¹, L. Redmon¹, and G. Evers², ¹Texas Cooperative Extension, College Station, TX, ²Texas Agricultural Experiment Station, Overton.
- 126 3:30 PM Characterization of Alabama feeder cattle through the Alabama beef connection program. J. Elmore and L. Kriese-Anderson*, Auburn University, Auburn, AL.
- 127 3:45 PM Factors affecting the sale price of pregnant beef heifers in the Georgia H.E.R.D program. J. E. Rossi*, R. C. Lacy, T. W. Wilson, M. E. Pence, and B. G. Mullinix, University of Georgia, Tifton.
- 128 4:00 PM Distance education for multi-state beef cattle extension programming. J. Parish*¹, W. McKinley¹, S. Seal¹, J. Rowntree², and L. Kriese-Anderson³, ¹Mississippi State University, Mississippi State, ²Louisiana State University Agricultural Center, Baton Rouge,, ³Auburn University, Auburn, AL.
- 129 4:15 PM Computer use by Tennessee cattle producers. J. B. Neel*, A. E. Fisher, C. D. Lane, W. W. Gill, F. D. Kirkpatrick, and A. J. Rhea, University of Tennessee, Knoxville.
- 130 4:30 PM Group marketing beef calves from small producers in Georgia: A startup experience. B Freeman*² and W. R. Getz¹, ¹Fort Valley State University, Fort Valley, GA, ²ABS Global, DeForest, WI.