

**SOUTHERN SECTION**

**American Society  
of Animal Science**

**ANNUAL  
MEETING**

**February 4–8, 2005  
Little Rock, Arkansas**

**In Conjunction with the 102<sup>nd</sup>  
Annual Convention  
of the Southern Association  
of Agricultural Scientists**

**AMERICAN SOCIETY OF ANIMAL  
SCIENCE OFFICERS  
2004-2005**

Dr. James R. Males, President

Oregon State University  
Corvallis, OR

Dr. David S. Buchanan, President-Elect  
Oklahoma State University  
Stillwater, OK

Dr. Terry D. Etherton, Past President  
The Pennsylvania State University  
University Park, PA

Dr. J. Joe Ford, Program Chair  
US Meat Animal Research Center  
Clay Center, NE

Dr. Ronnie D. Green, Recording Secretary  
USDA-ARS  
Beltsville, MD

Dr. Jerome F. Baker, Executive Director  
American Society of Animal Science  
Savoy, IL

Paula P. Schultz, Associate Executive Director  
American Society of Animal Science  
Savoy, IL

## 2004-2005 ASAS SOUTHERN SECTION OFFICERS

Dr. Kenneth L. Esbenshade, President  
North Carolina State University  
Raleigh, NC

Dr. Ronald D. Randel, President-Elect  
Texas A&M University  
Overton, TX

Dr. Dale A. Coleman, Secretary-Treasurer  
Auburn University  
Auburn, AL

Dr. Chadwick C. Chase, Jr., Secretary-Treasurer-Elect  
USDA, ARS, STARS  
Brooksville, FL

Dr. Debra K. Aaron, Past President  
University of Kentucky  
Lexington, KY

## Award Sponsors 2005 Southern Section ASAS

The Southern Section of the American Society of Animal  
Science expresses appreciation to the following  
organizations for financial assistance:

Swine Industry Award for Innovation  
National Pork Board  
Des Moines, IA

Young Animal Scientist – Research  
Elanco Animal Health  
Greenfield, IN

Extension Award  
Boehringer Ingelheim, Vetmedica Divison  
St. Joseph, MO

Young Animal Scientist – Education

Undergraduate Paper Competition

Graduate Student Awards Competition

## PROGRAM EVENTS

Friday, February 4

Academic Quadrathlon (AQ)

9:00 pm: Advisor's Meeting      Fayetteville, AR

Saturday, February 5

AQ Lab Practicum

8:00 am - Noon      Fayetteville, AR

AQ Written Exam

1:00 - 5:00 pm      Fayetteville, AR

Sunday, February 6

AQ Quiz Bowl

8:00 am - noon      Caraway I,  
Caraway II

AQ Oral Presentations

8:00 am - noon      Caddo, Caraway III,  
Osage, Quapaw,  
Toltec

Registration

1:00 - 5:00 pm      Rotunda

AQ Quiz Bowl Championship & Awards Program

2:00 - 3:30 pm      Caraway I

ARPAS Exam

3:00 - 5:00 pm      Peck

Information Exchange Groups:

IEG-72 Enhancing Reproduction in Cattle - Randy

Stanko, President

1:00 - 4:00 pm      Neosho

IEG-75 Strategies for Southern Forages - Gary Hill,

President

1:00 - 4:00 pm      Izard

IEG - Small Ruminant Production - Joan Burke, President

1:00 - 4:00 pm      Harris

SAAS Opening Symposium

4:00 - 6:00 pm      Conway

ASAS Southern Section Advisory Committee/Executive  
Committee

6:00 - 8:00 pm      Miller

Monday, February 7

Registration

7:00 am - Noon

Rotunda

ARPAS Exams

10:00 - noon

Peck

Undergraduate Student Competition

8:00 - 10:00 am

Statehouse  
Ballroom B

Graduate Student Paper Competition

10:15 am - Noon

Statehouse  
Ballroom B

Registration

1:00 - 5:00 pm

Rotunda

ARPAS Exams

2:00 - 4:00 pm

Peck

Breeding and Genetics

1:00 - 3:00 pm

Lafayette

Pastures and Forages I and II

1:00 - 4:00 pm

Statehouse  
Ballroom A

Physiology

1:00 - 4:30 pm

Caraway II

Small Ruminant Production I and II

1:00 - 4:15 p.m.

Statehouse  
Ballroom B

Business Meeting

5:00 - 7:00 pm

Statehouse  
Ballroom A

Tuesday, February 8

Registration

8:00 - noon

Rotunda

Extension I and II

8:15 am - 12:15 pm

Statehouse  
Ballroom B

Meat Science

8:00 - 9:45 am	Neosho
Tropically Adapted Breeds - Regional Project S1013-S277 I and II	
8:00 - noon	Caraway I
Ruminant Animal Production	
9:00 - noon	Ouachita
Extension Luncheon	
12:30 - 2:30 pm	Fulton
Tropically Adapted Breeds - Regional Project S1013-S277 III and IV	
1:00 - 5:00 pm	Caraway I
Small Ruminant Production III and IV	
1:00 - 5:00 pm	Statehouse Ballroom B

**ASAS Southern Section  
Meeting  
Little Rock, Arkansas  
February 4-8, 2005**

**Monday, February 7, 2005**

Undergraduate Student Competition  
Room: Statehouse Ballroom B  
Monday 8:00–10:00

Chair: Juan Marcos Fernandez, Louisiana State  
University, Baton Rouge, LA

<b>Abstract</b>	<b>Time</b>	
1	8:00	Increased meat goat production through anestrous doe management. L. L. Schneider* <sup>1</sup> and R. L. Stanko <sup>1,2</sup> , <sup>1</sup> Texas A&M University-Kingsville, <sup>2</sup> Texas A&M University Agricultural Research Station.
2	8:15	Validation of spectrophotometric methods for determining sperm concentration in ram and bull semen. E. L. Chamberlain* <sup>1</sup> and R. W. Godfrey <sup>2</sup> , <sup>1</sup> Department of Animal Sciences, Louisiana State University, <sup>2</sup> Agricultural Experiment Station, University of the Virgin Islands.
3	8:30	Castration and concentrate feeding influence performance and carcass characteristics of meat goats. S. R. Johnson*, M. H. Poore, A. D. Shaeffer, S. R. Freeman, H. M. Glennon, and J.-M. Luginbuhl, North Carolina State University.
4	8:45	Improving voluntary feed intake by the sow during lactation. C. W. O'Gorman* <sup>1</sup> , J. Miller <sup>1</sup> , J. W. Rounsavall <sup>1</sup> , F. Neher <sup>2</sup> , and J. C. Laurenz <sup>1</sup> , <sup>1</sup> Texas A&M University-Kingsville, <sup>2</sup> Biomin, Inc.
5	9:00	Level and source of supplemental selenium in beef calves. R. S. Fry* <sup>1</sup> , E. B. Kegley <sup>1</sup> , M. E. Davis <sup>1</sup> , M. D. Ratcliff <sup>1</sup> , D. L. Galloway <sup>1</sup> , and R. A. Dvorak <sup>2</sup> , <sup>1</sup> University of Arkansas, Division of Agriculture, <sup>2</sup> Alltech.
6	9:15	Dehydroepiandrosterone-sulfate (DHEAS) enhances immunization response to keyhole limpet hemocyanin (KLH) and ovalbumin (OVA). J. Dominguez* <sup>1</sup> , N. Burdick <sup>1</sup> , T. H. Welsh, Jr. <sup>2</sup> , and J. C. Laurenz <sup>1</sup> , <sup>1</sup> Texas A&M University-Kingsville, <sup>2</sup> Texas Agricultural Experiment Station-College Station.
7	9:30	Effects of dexamethasone, and selenium and vitamin E on steers consuming tall fescue baleage. C. Garner*, M. Nihsen, Z. Johnson, D. Kreider, and C. Rosenkrans, Jr., Department of Animal Science, University of Arkansas.

- 8 9:45 The effect of fatty acids on the insulin response of L6 myoblasts. N. C. Burdick\* and J. C. Laurenz, Texas A&M University-Kingsville.  
10:00 Break

Graduate Student Competition  
Room: Statehouse Ballroom B  
Monday 10:15–noon

Chair: Chance Brooks, Texas Tech University, Lubbock, TX

- | Abstract | Time  |  |
|----------|-------|--|
| 9        | 10:15 | Supplementation with dietary fat compared to ryegrass grazing on carcass traits and reproductive efficiency in yearling beef heifers. A. R. Dos Santos* <sup>1,2</sup> , S. T. Willard <sup>1</sup> , and R. C. Vann <sup>2</sup> , <sup>1</sup> Department of Animal and Dairy Sciences, Mississippi State, MS, <sup>2</sup> Brown Loam Experiment Station.   |
| 10       | 10:30 | Effects of sericea lespedeza hay on goats infected with <i>Haemonchus contortus</i> . S. A. Shaik* <sup>1</sup> , T. H. Terrill <sup>1</sup> , B. Kouakou <sup>1</sup> , G. Kannan <sup>1</sup> , J. E. Miller <sup>2</sup> , R. M. Kaplan <sup>3</sup> , J. M. Burke <sup>4</sup> , and J. A. Mosjidis <sup>5</sup> , <sup>1</sup> Fort Valley State University, <sup>2</sup> Louisiana State University, <sup>3</sup> The University of Georgia, <sup>4</sup> USDA, ARS-DBSFRC, <sup>5</sup> Auburn University.  |
| 11       | 10:45 | Efficacy of copper oxide wire particles against gastrointestinal nematodes of goats. R. K. Kallu* <sup>1</sup> , T. H. Terrill <sup>1</sup> , and J. E. Miller <sup>2</sup> , <sup>1</sup> Fort Valley State University, <sup>2</sup> Louisiana State University.  |
| 12       | 11:00 | Effects of feeding <i>ascophyllum nodosum</i> supplementation in finishing cattle diets to improve overall quality grades. M. Anderson* <sup>1</sup> , J. W. Johnson <sup>1</sup> , S. Kim <sup>1</sup> , M. Miller <sup>1</sup> , J. C. Brooks <sup>1</sup> , J. Gleghorn <sup>2</sup> , D. Woerner <sup>1</sup> , Z. Vineyard <sup>1</sup> , J. Byrd <sup>1</sup> , W. Palmore <sup>1</sup> , M. Jaks <sup>1</sup> , M. Teague <sup>1</sup> , and J. Blanton Jr. <sup>1</sup> , <sup>1</sup> Texas Tech University, <sup>2</sup> Nutrition Service Associates. |
| 13       | 11:15 | No-till compared to reduced-till and conventional tillage systems for small-grain forages. M. Bowman*, P. Beck, K. Lusby, S. Gunter, and D. Hubbell, University of Arkansas.   |
| 14       | 11:30 | Mutations in the NADH complex 1 gene sequence of tissues from Holstein bulls and their dams. C. Stanley*, J. Chandler, A. Canal, C. Williams, A. Anderson, and D. Blouin, LSU Agricultural Center.   |
| 15       | 11:45 | Dexamethasone (DEX) and Insulin-like growth factor-1 (IGF-1) effects on pig macrophage nitric oxide production <i>in vitro</i> . L. A. Soliz* <sup>1</sup> , T. H. Welsh, Jr. <sup>2</sup> , and J. C. Laurenz <sup>1</sup> , <sup>1</sup> Texas A&M University-Kingsville, <sup>2</sup> Texas Agricultural Experiment Station-College Station.  |

Breeding and Genetics  
Room: Lafayette  
Monday 1:00–3:00

Chair: S. M. DeRouen, Hill Farm Research Station,  
Louisiana State University AgCenter

Abstract	Time	
16	1:00	Different measures of energetic efficiency, ultrasound and carcass merit and their relationships with mitochondrial activity in Angus cattle. B. A. Sandelin*, A. H. Brown, Jr. <sup>1</sup> , C. Ojano-Dirain <sup>1</sup> , M. Iqbal <sup>1</sup> , W. G. Bottje <sup>1</sup> , M. A. Brown <sup>2</sup> , W. O. Herring <sup>3</sup> , M. Akin <sup>4</sup> , Z. B. Johnson <sup>1</sup> , and R. T. Baublits <sup>1</sup> , <sup>1</sup> University of Arkansas, <sup>2</sup> USDA-ARS Grazinglands Research Laboratory, <sup>3</sup> Smithfield Premium Genetics Group, <sup>4</sup> Circle A Angus Ranch.
17	1:15	Success at first insemination in Australian Angus cattle: analysis of uncertain binary responses. M. Spangler*, R. Sapp, R. Rekaya, and J. Bertrand, University of Georgia.
18	1:30	Simulation of first insemination success in beef cattle: Analysis of uncertain binary responses using fuzzy logic classification. R. L. Sapp*, M. L. Spangler, R. Rekaya, and J. K. Bertrand, The University of Georgia.
19	1:45	Effects of climatic and phototrophic conditions prior to feeding on feed intake of beef bulls during post-weaning feedlot performance tests. G. T. Tabler* <sup>1</sup> , A. H. Brown, Jr. <sup>1</sup> , E. E. Gbur <sup>2</sup> , I. L. Berry <sup>3</sup> , Z. B. Johnson <sup>1</sup> , D. W. Kellogg <sup>1</sup> , and K. C. Thompson <sup>2</sup> , <sup>1</sup> University of Arkansas Department of Animal Science, <sup>2</sup> University of Arkansas Agricultural Statistics Lab, <sup>3</sup> University of Arkansas Department of Biological and Agricultural Engineering.
20	2:00	Effects of climate and photoperiod on feed intake of beef bulls during feedlot performance tests. G. T. Tabler* <sup>1</sup> , A. H. Brown, Jr. <sup>1</sup> , E. E. Gbur <sup>2</sup> , I. L. Berry <sup>3</sup> , Z. B. Johnson <sup>1</sup> , K. C. Thompson <sup>2</sup> , and D. W. Kellogg <sup>1</sup> , <sup>1</sup> University of Arkansas Department of Animal Science, <sup>2</sup> University of Arkansas Agricultural Statistics Lab, <sup>3</sup> University of Arkansas Department of Biological and Agricultural Engineering.
21	2:15	Relationships between performance test traits and age at first farrowing in four breeds of swine. Z. Johnson* <sup>1</sup> , J. Chewning <sup>1</sup> , and R. Nugent, III <sup>2</sup> , <sup>1</sup> University of Arkansas, <sup>2</sup> The Pork Group, Tyson Foods, Inc.
22	2:30	Estimation of (co) variance components due to genetic competition effects in pigs. J. P. Cassady* <sup>1</sup> and L. D. Van Vleck <sup>2</sup> , <sup>1</sup> North Carolina State University, <sup>2</sup> USDA-ARS, Roman L. Hruska U.S. Meat Animal Research Center.
23	2:45	A study of parasite challenge in goats. J. M. Dzakuma* <sup>1</sup> , L. C. Nuti <sup>1</sup> , B. M. Johnson <sup>1</sup> , N. C. Beckford <sup>1</sup> , S. E. Kom <sup>1</sup> , P. L. Diamond <sup>2</sup> , and T. M. Craig <sup>2</sup> , <sup>1</sup> Prairie View A&M University, <sup>2</sup> Texas A&M University.

Pastures and Forages I

Room: Statehouse Ballroom A

Monday 1:00–2:30

Chair: Stacey Gunter, University of Arkansas, Hope, AR

Abstract	Time	
24	1:00	Evaluation of two digestibility markers for cattle consuming wheat pasture or alfalfa hay based diets. L. Appeddu* <sup>1</sup> , K. Sweeney <sup>1</sup> , J. Su <sup>1</sup> , K. Mediano <sup>1</sup> , and M. Brown <sup>2</sup> , <sup>1</sup> Southwestern Oklahoma State University, <sup>2</sup> USDA-ARS Grazinglands Research Laboratory.
25	1:15	Remote sensing of crude protein in bermudagrass pastures during the summer grazing season. P. J. Starks* <sup>1</sup> , W. A. Phillips <sup>1</sup> , and S. W. Coleman <sup>2</sup> , <sup>1</sup> USDA-ARS Grazinglands Res. Lab, <sup>2</sup> USDA-ARS Subtropical Ag. Res. Sta.
26	1:30	Influence of crude protein concentration in bermudagrass hay on organic matter digestibility. M. S. Gadberry*, T. R. Troxel, J. A. Jennings, and G. V. Davis, University of Arkansas, Cooperative Extension Service.
27	1:45	<i>In situ</i> degradation of native legumes and alfalfa in goats and cattle. J. Foster* <sup>1</sup> , J. Muir <sup>1</sup> , B. Lambert <sup>1,2</sup> , and D. Pawelek <sup>1</sup> , <sup>1</sup> Texas Agricultural Experiment Station, <sup>2</sup> Department of Animal Sciences, Tarleton State University.
28	2:00	Nutritional quality evaluation of forage from bahiagrass selections. R. Myer* <sup>1</sup> , S. Coleman <sup>2</sup> , J. Carter <sup>1</sup> , A. Blount <sup>1</sup> , and R. Littell <sup>1</sup> , <sup>1</sup> University of Florida, <sup>2</sup> USDA-ARS, STARS.
29	2:15	Aerobic stability of wheat and orchardgrass balage during winter months. R. Rhein, W. Coblenz*, J. Turner, C. Rosenkrans, R. Ogden, and D. Kellogg, University of Arkansas Division of Agriculture.
	2:30	Break

Pastures and Forages II  
 Room: Statehouse Ballroom A  
 Monday 2:45–4:00  
 Chair: Warren Gill, University of Tennessee, Nashville,  
 TN

Abstract	Time	
30	2:45	Interseeding small grains and(or) annual ryegrass into bermudagrass sod for growing cattle. P. A. Beck*, S. A. Gunter, C. B. Stewart, and J. M. Phillips, University of Arkansas, SW Research & Extension Center.
31	3:00	Timing of herbage allocation 1. Effect on beef heifers daily grazing pattern. P. Gregorini* <sup>1,2</sup> , M. Eirin <sup>1</sup> , R. Refi <sup>1</sup> , M. Ursino <sup>1</sup> , and O. Ansin <sup>1</sup> , <sup>1</sup> FCAYF, Universidad Nacional de La Plata, <sup>2</sup> Animal Science Department, University of Arkansas.
32	3:15	Timing of herbage allocation 2. Effect on beef heifers weight gain, body condition score and daily herbage intake. P. Gregorini* <sup>1,2</sup> , M. Eirin <sup>1</sup> , R. Refi <sup>1</sup> , M. Ursino <sup>1</sup> , and O. Ansin <sup>1</sup> , <sup>1</sup> FCAYF, Universidad Nacional de La Plata, <sup>2</sup> Animal Science Department, University of Arkansas.
33	3:30	Effect of weaning date and pasture rotation frequency on weaning and post-weaning growth performance by fall-born calves grazing tall fescue pastures. K. Coffey* <sup>1</sup> , W. Coblenz <sup>1</sup> , R. Ogden <sup>1</sup> , T. Smith <sup>1</sup> , D. Scarbrough <sup>1</sup> , D. Hubbell, III <sup>1</sup> , C. Rosenkrans <sup>1</sup> , and J. Jennings <sup>2</sup> , <sup>1</sup> University of Arkansas, <sup>2</sup> Cooperative Extension Service.
34	3:45	Incidence of fecal shedding of <i>E. coli</i> O157:H7 and <i>Salmonella</i> in stocker steers grazing different forages. M. L. Looper* <sup>1</sup> , T. S. Edrington <sup>2</sup> , R. Flores <sup>3</sup> , C. F. Rosenkrans, Jr. <sup>3</sup> , M. E. Nihsen <sup>3</sup> , and G. E. Aiken <sup>4</sup> , <sup>1</sup> USDA-ARS, Dale Bumpers Small Farms Research Center, <sup>2</sup> USDA-ARS, Feed and Food Safety Lab, <sup>3</sup> University of Arkansas, <sup>4</sup> USDA-ARS, Forage Animal Production Research Unit.

Physiology  
 Room: Caraway II  
 Monday 1:00–4:30  
 Chair: M.J. Estienne, Virginia Tech,  
 Blacksburg, VA

Abstract	Time	
35	1:00	Hormonal profiles in pregnant ewes following intra-uterine inoculation with <i>Escherichia coli</i> . K. Moulton <sup>*1</sup> , S. Willard <sup>1</sup> , P. Ryan <sup>1</sup> , A. Chromiak <sup>1</sup> , D. Tucker <sup>1</sup> , C. Klauser <sup>2</sup> , S. Rodts-Palenik <sup>2</sup> , C. Rose <sup>2</sup> , J. Morrison <sup>2</sup> , and W. Bennett <sup>2</sup> , <sup>1</sup> Department of Animal and Dairy Science, <sup>2</sup> Department of Obstetrics and Gynecology, University of Mississippi Medical Center.
36	1:15	Use of digital infrared thermal imaging to evaluate the effect of scrotal color on scrotal surface temperatures of hair sheep rams in the tropics. S. Augustin <sup>*</sup> , R. W. Godfrey, R. E. Dodson, and A. J. Weis, Agricultural Experiment Station, University of the Virgin Islands.
37	1:30	Effect of pyruvate and lactate on motility of cold stored stallion spermatozoa. G. Webb <sup>*</sup> and C. Dekat, Southwest Missouri State University.
38	1:45	Motility characteristics of boar spermatozoa during long-term storage in different extenders. M. Estienne <sup>*1</sup> , J. Day <sup>2</sup> , and A. Harper <sup>1</sup> , <sup>1</sup> Virginia Polytechnic Institute and State University, <sup>2</sup> Auburn University.
39	2:00	The acute-phase response of cloned pigs following an immune challenge. J. Carroll <sup>*1</sup> , B. Carter <sup>2</sup> , S. Korte <sup>3</sup> , S. Dowd <sup>1</sup> , and R. Prather <sup>4</sup> , <sup>1</sup> Livestock Issues Research Unit, ARS-USDA, Lubbock, Texas, <sup>2</sup> College of Veterinary Medicine, Kansas State University, Manhattan, <sup>3</sup> Department of Veterinary Pathobiology, University of Missouri, Columbia, <sup>4</sup> Department of Animal Science, University of Missouri, Columbia.
40	2:15	Cortisol concentrations in gilts housed individually in stalls or in groups in pens during the first 30 d post-mating. M. Estienne <sup>*</sup> , A. Harper, and J. Knight, Virginia Polytechnic Institute and State University.
	2:30	Break
41	2:45	Effects of GnRH in combination with PGF <sub>2α</sub> on ovarian function in post-pubertal Holstein heifers. R. Harper <sup>1</sup> , W. Bennett <sup>2</sup> , E. Cuadra <sup>*1</sup> , C. Vaughn <sup>1</sup> , and N. Whitworth <sup>2</sup> , <sup>1</sup> Alcorn State University, <sup>2</sup> University Medical Center.
42	3:00	Utilization of progesterone releasing devices on improving reproductive performance of 'at-risk' beef cows. R. C. Vann <sup>*1</sup> and T. Engelken <sup>2</sup> , <sup>1</sup> MAFES-Brown Loam Experiment Station, <sup>2</sup> CVM-Mississippi State University.
43	3:15	Effects of intra-vaginal progesterone releasing devices on the survival of embryos transferred to recipient suckling multiparous beef cows. E. J. Cuadra <sup>1</sup> , R. C. Vann <sup>*2</sup> , W. A. Bennett <sup>3</sup> , R. Johnson <sup>1</sup> , S. T. Willard <sup>4</sup> , and T. Kiser <sup>4</sup> , <sup>1</sup> Alcorn State

- University, <sup>2</sup>Brown Loam Experiment Station, <sup>3</sup>University of Mississippi Medical Center, <sup>4</sup>Dept of Animal & Dairy Science, Mississippi State University.
- 44 3:30 Effects of supplemental progesterone in a timed insemination protocol in beef heifers. N. Post\*, D. Kreider, R. Rorie, and T. Lester, University of Arkansas.
- 45 3:45 Effect of melengestrol acetate (MGA) and monensin supplementation on puberty and pregnancy rates in crossbred beef heifers. J. L. Roberts<sup>1</sup>, R. P. DeVecchio<sup>1</sup>, G. T. Gentry, Jr.\*<sup>1,2</sup>, D. Sanders<sup>2</sup>, P. E. Humes<sup>1</sup>, and R. A. Godke<sup>1</sup>, <sup>1</sup>Department of Animal Sciences, LSU Agricultural Center, <sup>2</sup>Idlewild Research Station.
- 46 4:00 Growth traits and reproductive parameters of Holstein and Gir (*Bos indicus*) x Holstein bulls and heifers. A. Denson\*<sup>1</sup>, S. Schmidt<sup>1</sup>, S. Bowers<sup>1</sup>, T. Dickerson<sup>1</sup>, K. Graves<sup>1</sup>, R. Vann<sup>2</sup>, and S. Willard<sup>1</sup>, <sup>1</sup>Department of Animal and Dairy Sciences, Mississippi State University, <sup>2</sup>Brown Loam Branch Experiment Station.
- 47 4:15 Puberty in beef heifers fed high or low starch diets. R. P. Wettemann\*, N. H. Ciccioli, S. L. Charles-Edwards, H. T. Purvis, K. S. Lusby, G. W. Horn, and D. L. Lalman, Oklahoma Agricultural Experiment Station.

### Small Ruminant Production I Reproduction

Room: Statehouse Ballroom B

Monday 1:00–2:30

Chair: Joan Burke, USDA, Agricultural Research Service,  
Booneville, AR

- | <b>Abstract</b> | <b>Time</b> |  |
|-----------------|-------------|--|
| 48              | 1:00        | The effect of hCG on circulating progesterone in goats at the end of the breeding season. A. Landry*, H. DiMaggio, W. Burnside, L. Sarradet, J. Saenz, D. Landry*, L. Gentry, K. Bondioli, and R. Godke, Department of Animal Sciences, Louisiana State University Agricultural Center.      |
| 49              | 1:15        | Hair sheep performance in an accelerated lambing and extensive management system in the tropics: A ten year summary. R. W. Godfrey*, J. R. Collins, E. L. Hensley, H. A. Buroker, J. K. Bultman, and A. J. Weis, Agricultural Experiment Station, University of the Virgin Islands.          |
| 50              | 1:30        | Use of melengestrol acetate (MGA) feeding to synchronize mating in hair sheep and meat goats during seasonal breeding. S. Wildeus* <sup>1</sup> , D. H. Keisler <sup>2</sup> , and J. R. Collins <sup>1</sup> , <sup>1</sup> Virginia State University, <sup>2</sup> University of Missouri. |
| 51              | 1:45        | Effects of oocyte transport methods on maturation rate in sheep. B. Sayre*, Virginia State University.   |
| 52              | 2:00        | Application of a bovine electronic estrus mount detection system for use in goats and hair sheep. S.   |

- Wildeus\* and J. R. Collins, Virginia State University.
- 53 2:15 Initial assessment of three meat goat breeds for preweaning doe-kid performance. R. Browning, Jr.\*, S. Kebe, T. Payton, B. Donnelly, P. Pandya, and M. Byars, IAgER - Tennessee State University.
- 2:30 Break

Small Ruminant Production II  
Parasite Control  
Room: Statehouse Ballroom B  
Monday 2:45–4:15  
Chair: Steve Hart, Langston University,  
Langston, OK

- | Abstract | Time |  |
|----------|------|--|
| 54       | 2:45 | Effect of breed, rearing management, and supplement type on gastrointestinal parasitism in hair sheep lambs. S. Wildeus* <sup>1</sup> , J. E. Miller <sup>2</sup> , and J. R. Collins <sup>1</sup> , <sup>1</sup> Virginia State University, <sup>2</sup> Louisiana State University.  |
| 55       | 3:00 | The use of copper oxide wire particles (COWP) in pregnant ewes. J. Burke* <sup>1</sup> and J. Miller <sup>2</sup> , <sup>1</sup> USDA, Agricultural Research Service, <sup>2</sup> School of Veterinary Medicine, Louisiana State University.  |
| 56       | 3:15 | Interaction between copper oxide wire particles (COWP) and <i>Duddingtonia flagrans</i> in hair breed lambs. J. Burke* <sup>1</sup> , J. Miller <sup>2</sup> , M. Larsen <sup>3</sup> , and T. Terrill <sup>4</sup> , <sup>1</sup> USDA, Agricultural Research Service, <sup>2</sup> School of Veterinary Medicine, Louisiana State University, <sup>3</sup> The Royal Veterinary and Agricultural University, <sup>4</sup> Agricultural Research Station, Fort Valley State University. |
|          | 3:30 | Break  |
| 57       | 3:45 | Effect of 0.5, 1.0 and 1.5 gram copper oxide wire particles on natural infection in lambs. J. Miller <sup>1</sup> , J. Burke <sup>2</sup> , and T. Terrill* <sup>3</sup> , <sup>1</sup> Louisiana State University, <sup>2</sup> USDA ARS Booneville, <sup>3</sup> Fort Valley State University.   |
| 58       | 4:00 | Effect of the condensed tannin containing forage, sericea lespedeza, fed as hay, on natural and experimental challenge infection in lambs. K. Lange <sup>1</sup> , D. Olcott <sup>1</sup> , J. Miller* <sup>1</sup> , J. Mosjidis <sup>2</sup> , T. Terrill <sup>3</sup> , and J. Burke <sup>4</sup> , <sup>1</sup> Louisiana State University, <sup>2</sup> Auburn University, <sup>3</sup> Fort Valley State University, <sup>4</sup> USDA ARS Booneville.                             |

**Business Meeting**  
5:00–7:00 p.m.  
Statehouse Ballroom A

Tuesday, February 8, 2005

Extension I

Development and Evaluation of Original Programs  
 Room: Statehouse Ballroom B  
 Tuesday 8:15–10:00  
 Chair: John Arthington, University of Florida, Ona, FL

Abstract	Time	
74	8:15	Results of technology questions as part of Master Cattle Producer Survey. J. B. Neel*, C. D. Lane, W. W. Gill, and A. E. Fisher, University of Tennessee.
75	8:30	Cooperative multi-state extension programming; the five state beef initiative. Project development and extension program impacts in Kentucky. L. Meyer*, K. Burdine, and J. Johns, University of Kentucky.
76	8:45	Cooperative multi-state extension programming; the five state beef initiative. Carcass data, case studies and pricing scenarios for improving on-farm herd management in Kentucky. K. Burdine*, J. Johns, and L. Meyer, University of Kentucky.
77	9:00	Producer education using a cattle feeding profitability prediction contest. J. A. Parish* and W. B. McKinley, Mississippi State University.
78	9:15	Horse Round Table: A unique approach to a one evening program. F. Harper* <sup>1</sup> , N. Denton <sup>1</sup> , T. Petty <sup>1</sup> , K. Hart <sup>1</sup> , and S. Jerrell <sup>2</sup> , <sup>1</sup> University of Tennessee, <sup>2</sup> Virginia Polytechnic Institute and State University.
79	9:30	Live placing of pigs from discrete categories of a packer value index at the Virginia State Fair Youth Market Hog Show. A. Harper*, C. Wood, M. Estienne, and J. Zhao, Virginia Polytechnic Institute and State University.
80	9:45	Effect of herd size on production costs and returns for farms enrolled in the Arkansas Beef Improvement, Integrated Resource Management program. J. T. Richeson*, M. S. Gadberry, and T. R. Troxel, University of Arkansas, Cooperative Extension Service.
	10:00	Break

Extension II  
 Applied Research and Demonstrations  
 Room: Statehouse Ballroom B  
 Tuesday 10:15–12:15  
 Chair: John T. Johns, University of Kentucky, Lexington, KY

Abstract	Time	
81	10:15	Preconditioning reduces sickness and death loss in weaned calves. D. Lalman* <sup>1</sup> , A. Hutson <sup>1</sup> , W. Shearhart <sup>1</sup> , C. Ward <sup>1</sup> , and S. McKinley <sup>2</sup> , <sup>1</sup> Oklahoma State University, <sup>2</sup> Oklahoma Cattlemen's Association.
82	10:30	The effects of method of castration, and/or implantation on cow/calf performance when creep grazing either tall fescue or crabgrass. B. Stewart* <sup>1</sup> , S. Gunter <sup>1</sup> , P. Beck <sup>1</sup> , M. Phillips <sup>1</sup> , J. Parrish <sup>2</sup> , and T. Troxel <sup>2</sup> , <sup>1</sup> University of Arkansas, SW Research &

- Extension Center, <sup>2</sup>University of Arkansas Cooperative Extension Service.
- 83 10:45 Impact of implant anomaly on performance and return of stocker cattle. P. A. Beck\* and S. A. Gunter, University of Arkansas, SW Research & Extension Center.
- 84 11:00 Corn gluten feed as a diet ingredient for Senepol- or Angus-sired finishing steers. M. H. Poore\*, J. P. Cassady, and G. A. Benson, North Carolina State University.
- 85 11:15 Effects of feeding soybean hulls or corn gluten feed during the preconditioning period on feedlot performance and carcass characteristics of Angus steers. J. E. Rossi\*<sup>1</sup> and P. Worley<sup>2</sup>, <sup>1</sup>University of Georgia, Coastal Plain Experiment Station, <sup>2</sup>Northwest Research and Education Center, Calhoun.
- 86 11:30 Milk production evaluation of straightbred Nellore and Nellore x Red Angus crossbred primiparous cows. J. M. B. Vendramini\* and N. C. Favero, University of Florida.
- 87 11:45 Assessing and improving mineral status of a cow-calf herd. J. Gentry\*<sup>1</sup>, K. Downs<sup>1</sup>, W. Gill<sup>2</sup>, and A. Fisher<sup>2</sup>, <sup>1</sup>Middle Tennessee State University, <sup>2</sup>University of Tennessee.
- 88 12:00 Effect of source of energy on growth and reproduction of replacement beef heifers. J. C. Wuenschel\*, D. L. Cuddy, S. P. Greiner, and J. B. Hall, Virginia Tech.

### Meat Science

Room: Neosho

Tuesday 8:00–9:45

Chair: Susan Duckett, University of Georgia, Athens, GA

#### Abstract Time

- 89 8:00 Relationship between ultrasound and carcass measures of Charolais-cross harvest cattle using an automated computer tracing software. T. Perkins\*<sup>1</sup>, C. Fercherio<sup>2</sup>, and J. Worthington<sup>1</sup>, <sup>1</sup>Southwest Missouri State University, <sup>2</sup>Purina Mills, LLC.
- 90 8:15 Fatty acid profiles and meat characteristics of different biological types of beef cattle developed on grazed forages under a rotational management-intensive grazing system. M. Thomas\*<sup>1</sup>, D. Kellogg<sup>1</sup>, A. Brown<sup>1</sup>, D. Rule<sup>2</sup>, Z. Johnson<sup>1</sup>, K. Anschutz<sup>1</sup>, R. Baublits<sup>1</sup>, and C. Murietta<sup>2</sup>, <sup>1</sup>University of Arkansas, <sup>2</sup>University of Wyoming.
- 91 8:30 Effects of dietary fat source on carcass fatty acid composition of pigs slaughtered at 113.6 kg. J. K. Apple\*, C. V. Maxwell, D. L. Galloway, and L. K. Rakes, Department of Animal Sciences, University of Arkansas.
- 92 8:45 Effects of sodium chloride, phosphate type and concentration, and pump rate on beef *biceps femoris* quality and sensory characteristics. R. T. Baublits\*, F. W. Pohlman, A. H. Brown, Jr., and Z. B. Johnson, University of Arkansas.

- 93 9:00 Effects of sodium chloride, phosphate type and concentration, and pump rate on beef *biceps femoris* instrumental color characteristics. R. T. Baublits\*, F. W. Pohlman, A. H. Brown, Jr., and Z. B. Johnson, University of Arkansas.
- 94 9:15 Meat quality and sensory characteristics of beef *biceps femoris* steaks treated with sodium chloride and differing phosphate types, concentrations and pump rates, compared with untreated steaks or steaks treated with only sodium chloride. R. T. Baublits\*, F. W. Pohlman, A. H. Brown, Jr., and Z. B. Johnson, University of Arkansas.
- 95 9:30 Instrumental color characteristics of beef *biceps femoris* steaks treated with sodium chloride and differing phosphate types, concentrations or pump rates, compared with untreated steaks or steaks treated with only sodium chloride. R. T. Baublits\*, F. W. Pohlman, A. H. Brown, Jr., and Z. B. Johnson, University of Arkansas.

Tropically Adapted Breeds - Regional Project

S1013-S277 I

Room: Caraway I

Tuesday 8:00–10:00

Chair: Larry V. Cundiff, U.S. Meat Animal Research Center, ARS, USDA, Clay Center, NE

- Abstract Time**
- 8:00 Introduction, Larry Cundiff, U.S. Meat Animal Research Center, ARS, USDA, Clay Center, NE.
- 96 8:05 Rationale for evaluating alternative sources of subtropically adapted beef cattle germplasm. F. A. Thrift\*<sup>1</sup> and T. A. Thrift\*<sup>2</sup>, <sup>1</sup>University of Kentucky, <sup>2</sup>University of Florida.
- 97 8:25 Florida crossbreeding research. D. G. Riley\*<sup>1</sup>, G. R. Hansen<sup>2</sup>, J. R. Crockett<sup>2</sup>, T. A. Olson<sup>2</sup>, and C. C. Chase, Jr.<sup>1</sup>, <sup>1</sup>ARS, <sup>2</sup>Univ. of Florida.
- 98 8:45 Reproduction of *Bos indicus* breeds and crosses. R. D. Randel\*, Texas A&M University Agricultural Research and Extension Center - Overton.
- 99 9:00 Birth to harvest attributes of Brahman and Brahman-influenced steers. F. M. Rouquette\*<sup>1</sup>, C. R. Long<sup>1</sup>, J. J. Cleere<sup>2</sup>, and R. D. Randel<sup>1</sup>, <sup>1</sup>Texas Agricultural Experiment Station, <sup>2</sup>Texas Cooperative Extension.
- 100 9:20 Zero, 1/4, and 1/2 Brahman cows in spring vs fall calving programs. D. Buchanan\* and R. Frahm, Oklahoma Agricultural Experiment Station.
- 101 9:35 Cow-calf performance of Brahman-British and Brahman-Continental beef females. S. M. DeRouen\*<sup>1</sup>, W. E. Wyatt<sup>2</sup>, P. E. Humes<sup>3</sup>, D. E. Franke<sup>3</sup>, and D. C. Blouin<sup>3</sup>, <sup>1</sup>Louisiana State University Agricultural Center, Homer, <sup>2</sup>Jeanerette, <sup>3</sup>Baton Rouge.
- 102 9:50 Feedlot performance and carcass characteristics of Brahman x British and Brahman x Continental Beef Steers. W. Wyatt\*, S. DeRouen, T. Bidner, P. Humes, D. Franke, and D. Blouin, Louisiana State University Agricultural Center.

Tropically Adapted Breeds - Regional Project  
 S1013-S277 II  
 Room: Caraway I  
 Tuesday 10:05–noon  
 Chair: M. D. Brown, ARS, USDA, El Reno, OK

Abstract	Time	
103	10:05	Reciprocal differences in gestation length and birth weight in <i>Bos indicus</i> / <i>Bos taurus</i> crosses. C. A. Gill*, T. S. Amen, J. O. Sanders, and A. D. Herring, Texas A&M University.
104	10:20	Maternal and fetal genotype influences on fetal growth. C. L. Ferrell*, USDA-ARS, U.S. Meat Animal Research Center.
105	10:35	Evaluation of F <sub>1</sub> crosses of five <i>Bos indicus</i> breeds with Hereford for birth, growth, carcass, cow productivity and longevity traits. J. Sanders* <sup>1</sup> , D. Riley <sup>2</sup> , J. Paschal <sup>1</sup> , and D. Lunt <sup>1</sup> , <sup>1</sup> Texas Agricultural Experiment Station, <sup>2</sup> United States Department of Agriculture, Agricultural Research Service, Subtropical Agricultural Research Station.
106	10:55	Evaluation of Brahman and tropically adapted <i>Bos taurus</i> breeds in the humid subtropics. C. C. Chase, Jr.* <sup>1</sup> , D. G. Riley <sup>1</sup> , T. A. Olson <sup>2</sup> , and S. W. Coleman <sup>1</sup> , <sup>1</sup> USDA, ARS, Subtropical Agricultural Research Station, <sup>2</sup> University of Florida.
107	11:15	Lifetime performance and efficiency of F <sub>1</sub> tropically adapted beef cattle breeds x Angus in arid rangeland. J. Holloway* <sup>1</sup> , B. Warrington <sup>1</sup> , D. Forrest <sup>2</sup> , R. Randel <sup>3</sup> , and C. Long <sup>3</sup> , <sup>1</sup> Texas Agricultural Experiment Station, <sup>2</sup> Texas A&M University, <sup>3</sup> Texas Agricultural Experiment Station.
108	11:35	Evaluation of the F <sub>1</sub> crosses of the Tuli, Boran, and Brahman with Hereford and Angus for birth, growth, carcass, cow productivity and longevity characteristics. J. Sanders* <sup>1</sup> , S. Cunningham <sup>1</sup> , A. Ducoing <sup>2</sup> , A. Herring <sup>1</sup> , and D. Lunt <sup>1</sup> , <sup>1</sup> Texas Agricultural Experiment Station, <sup>2</sup> Universidad Nacional Autonoma de Mexico.

Ruminant Animal Production

Room: Ouachita  
 Tuesday 9:00–noon  
 Chair: Mike Brown, West Texas A&M University,  
 Canyon, TX

Abstract	Time	
121	9:00	Relationship of prepartum concentrations of insulin-like growth factor-I (IGF-I) in cows with birth weight, concentrations of IGF-I, and weaning weights of calves. R. Flores* <sup>1</sup> , M. L. Loooper <sup>2</sup> , K. P. Coffey <sup>1</sup> , W. K. Coblenz <sup>1</sup> , and C. F. Rosenkrans, Jr. <sup>1</sup> , <sup>1</sup> University of Arkansas, <sup>2</sup> USDA-ARS, Dale Bumpers Small Farms Research Center.

- 122 9:15 Effects of cool season annuals with legumes on wintering beef cows. J. D. Shockey\*<sup>2</sup>, W. A. Whitworth<sup>1</sup>, T. G. Montgomery<sup>1</sup>, and S. A. Gunter<sup>2</sup>, <sup>1</sup>University of Arkansas SEREC, Moticello, <sup>2</sup>University of Arkansas SWREC, Hope.
- 123 9:30 Perennial versus annual grasses as a supplement to gestating beef cows. S Hutchison\*, S. A. Gunter, P. A. Beck, C. B. Stewart, J. D. Shockey, and J. M. Phillips, Southwest Research & Extension Center, University of Arkansas, Hope.
- 124 9:45 Effects of beef cow parity on responses to early calf weaning. S. Galindo-Gonzalez\*<sup>1,2</sup>, J. D. Arthington<sup>1,2</sup>, and A. De Vries<sup>2</sup>, <sup>1</sup>University of Florida, Range Cattle Research and Education Center, <sup>2</sup>University of Florida, Department of Animal Sciences.
- 125 10:00 Assessing castration at arrival on long-term growth performance of cattle. M. D. Ratcliff\*, E. B. Kegley, K. S. Lusby, S. A. Gunter, L. B. Daniels, and D. S. Hubbell, III, University of Arkansas Division of Agriculture.
- 126 10:15 Effects of time of castration on growth, feedlot performance, and carcass characteristics of Angus and Charolais-sired calves. M. L. Looper\*<sup>1</sup>, J. M. Burke<sup>1</sup>, L. J. McBeth<sup>2</sup>, C. R. Krehbiel<sup>2</sup>, R. Flores<sup>3</sup>, C. F. Rosenkrans, Jr.<sup>3</sup>, and G. E. Aiken<sup>4</sup>, <sup>1</sup>USDA-ARS, Dale Bumpers Small Farms Research Center, <sup>2</sup>Oklahoma State University, <sup>3</sup>University of Arkansas, <sup>4</sup>USDA-ARS, Forage Animal Production Research Unit.
- 127 10:30 The effects of energy supplementation and metaphylaxis on the performance of newly received cattle. S. A. Gunter\*<sup>1</sup>, P. A. Beck<sup>1</sup>, and D. S. Hubbell, III<sup>2</sup>, <sup>1</sup>University of Arkansas, Southwest Research & Extension Center, Hope, <sup>2</sup>Livestock & Forestry Branch Station (LFBS), Batesville.
- 128 10:45 Effects of anthelmintic treatment on calf gains while grazing tall fescue. C. Rosenkrans, Jr.\*<sup>1</sup>, M. Nihsen<sup>1</sup>, Z. Johnson<sup>1</sup>, T. Yazwinski<sup>1</sup>, D. Kreider<sup>1</sup>, K. Coffey<sup>1</sup>, W. Coblentz<sup>1</sup>, and C. West<sup>2</sup>, <sup>1</sup>Department of Animal Science, University of Arkansas, <sup>2</sup>Department of Crop, Soil, and Environmental Sciences, University of Arkansas.
- 129 11:00 Optimizing N supply for growing steers consuming forage diets supplemented with citrus pulp. J. D. Arthington\*<sup>1,2</sup> and A. T. Adesogan<sup>1</sup>, <sup>1</sup>University of Florida, Department of Animal Sciences, <sup>2</sup>University of Florida, Range Cattle Research and Education Center.
- 130 11:15 Cotton by-product supplements fed with hay: Steer performance and diet digestion. G. M. Hill\*, J. F. Baker, B. C. Hand, and B. G. Mullinix, Jr., University of Georgia.
- 131 11:30 The effect of replacing soybean meal with *Mucuna pruriens* on the performance of sheep. S. Chikagwa-Malunga\*<sup>1</sup>, A. Adesogan<sup>1</sup>, M. Huisden<sup>1</sup>, S. Kim<sup>1</sup>, N. Krueger<sup>1</sup>, D. Dean<sup>1</sup>, T. Ososanya<sup>1</sup>, K. Arriola<sup>1</sup>, and S. Phatak<sup>2</sup>, <sup>1</sup>University of Florida, <sup>2</sup>University of Georgia.

- 132 11:45 Effects of nitroethane administration on methane production in growing steers. E. G. Brown\*<sup>1</sup>, G. E. Carstens<sup>1</sup>, L. J. Slay<sup>1</sup>, S. A. Woods<sup>1</sup>, M. J. Quinn<sup>1</sup>, J. L. McReynolds<sup>2</sup>, R. C. Anderson<sup>2</sup>, and D. J. Nisbet<sup>2</sup>, <sup>1</sup>Texas Agricultural Experiment Station, <sup>2</sup>USDA/ARS, Food and Feed Safety Research Unit.

Tropically Adapted Breeds - Regional Project  
S1013-S277 III

Room: Caraway I

Tuesday 1:00–3:15

Chair: David G. Morrison, Louisiana State University,  
Baton Rouge, LA

Abstract	Time	
109	1:00	Performance of tropically adapted breeds in a temperate environment: Calving, growth, reproduction and maternal traits. L. V. Cundiff*, U. S. Meat Animal Research Center, ARS, USDA.
110	1:20	Feed utilization and performance of tropically adapted cattle. C. L. Ferrell*, T. G. Jenkins, and H. C. Freetly, USDA-ARS, U.S. Meat Animal Research Center.
111	1:35	Carcass and meat traits of tropically-adapted breeds. T. Wheeler*, S. Shackelford, and M. Koohmaraie, U.S. Meat Animal Research Center.
112	1:55	Cow efficiency during the preweaning period of tropically adapted cattle. T. G. Jenkins* and C. L. Ferrell, USDA-ARS, U.S. Meat Animal Research Center.
113	2:15	Foraging behavior of tropically adapted breeds. D. Forbes*, Texas Agricultural Experiment Station.
114	2:35	Evaluation of Boran, Tuli, Gelbvieh, and Brahman F1 crosses in Oklahoma. W. A. Phillips* <sup>1</sup> , R. P. Wettemann <sup>2</sup> , S. W. Coleman <sup>3</sup> , and J. W. Holloway <sup>4</sup> , <sup>1</sup> USDA-ARS Grazinglands Res Lab, <sup>2</sup> OK Agric. Exper. Sta., <sup>3</sup> USDA-ARS Subtropical Ag. Res Sta., <sup>4</sup> Texas A&M Res and Ext Center.
115	2:50	Genotype x environment interactions in Brahman, Angus, and reciprocal-cross cows and their calves. M. Brown* <sup>1</sup> and H. Brown, Jr. <sup>2</sup> , <sup>1</sup> USDA-ARS, Grazinglands Research Laboratory, <sup>2</sup> University of Arkansas.
	3:15	Break

Tropically Adapted Breeds - Regional Project  
S1013-S277 IV

Room: Caraway I

Tuesday 3:25–4:45

Chair: J. W. Holloway, Texas A&M University, College  
Station, TX

Abstract	Time	
116	3:25	Varying differences between sexes in birth weight and weaning weight of calves sired by tropically

- adapted breeds at six diverse U.S. locations. A. D. Herring\*<sup>1</sup>, S. F. Cunningham<sup>1</sup>, L. V. Cundiff<sup>2</sup>, C. C. Chase, Jr.<sup>3</sup>, J. O. Sanders<sup>1</sup>, W. A. Phillips<sup>4</sup>, J. F. Baker<sup>5</sup>, J. W. Holloway<sup>6</sup>, B. G. Warrington<sup>6</sup>, and S. W. Coleman<sup>4</sup>, <sup>1</sup>Texas A&M University, <sup>2</sup>USDA-ARS, <sup>3</sup>USDA-ARS, <sup>4</sup>USDA-ARS, <sup>5</sup>University of Georgia, <sup>6</sup>Texas Agricultural Experiment Station.
- 117 3:40 Genetic (co)variances for growth, carcass, and tenderness traits of Brahman steers. T. Smith\*<sup>1</sup>, J. Domingue<sup>1</sup>, T. Bidner<sup>1</sup>, J. Paschal<sup>2</sup>, G. Whipple<sup>3</sup>, and D. Franke<sup>1</sup>, <sup>1</sup>LSU Agricultural Center, <sup>2</sup>Texas A&M University, <sup>3</sup>University of Nebraska.
- 118 3:55 Evaluation of heterosis retention for cow productivity traits in *Bos indicus/Bos taurus* crosses. J. Sanders\*<sup>1</sup>, K. Key<sup>1</sup>, D. Riley<sup>2</sup>, and D. Lunt<sup>1</sup>, <sup>1</sup>Texas Agricultural Experiment Station, <sup>2</sup>United States Department of Agriculture, Agricultural Research Service, Subtropical Agricultural Research Station.
- 119 4:15 Direct and maternal breed additive and nonadditive genetic effects for reproductive, growth, and carcass traits in Brahman crossbred cattle. D. Franke\*<sup>1</sup>, S. Derouen<sup>1</sup>, and A. Williams<sup>2</sup>, <sup>1</sup>LSU Agricultural Center, <sup>2</sup>The Jacob Alliance.
- 120 4:30 Carcass and meat characteristics of Bonsmara-influenced cattle. R. K. Miller\*<sup>1</sup>, S. M. Falkenberg<sup>1</sup>, B. G. Warrington<sup>2</sup>, G. W. Chapman<sup>3</sup>, G. E. Carstens<sup>1</sup>, and J. W. Holloway<sup>2</sup>, <sup>1</sup>Texas A&M University, Department of Animal Science, <sup>2</sup>Texas A&M Research Center, Uvalde, <sup>3</sup>Chapman Ranches.

Small Ruminant Production III  
Meat Quality, Products, and Production  
Room: Statehouse Ballroom B  
Tuesday 1:00–2:45

Chair: Sam Jackson, Texas Tech University, Lubbock,  
TX

Abstract	Time	
59	1:00	Preharvest spray washing of goats: effects on stress responses and bacterial counts on skin and carcass surfaces. A. J. Hagerman*, G. Kannan, K. R. Eega, B. Kouakou, and G. W. McCommon, Fort Valley State University.
60	1:15	Effects of breed and carcass electrical stimulation on meat quality characteristics in goats. K. M. Gadiyaram* <sup>1</sup> , G. Kannan <sup>1</sup> , S. Galipalli <sup>1</sup> , T. D. Pringle <sup>2</sup> , and K. W. McMillin <sup>3</sup> , <sup>1</sup> Fort Valley State University, <sup>2</sup> The University of Georgia, <sup>3</sup> Louisiana State University AgCenter.
61	1:30	Carcass traits and meat quality of pasture-raised Katahdin crossbred lambs. D. J. Jackson* <sup>1</sup> , N. C. Whitley <sup>1</sup> , J. W. Lemaster <sup>2</sup> , and S. Schoenian <sup>2,3</sup> , <sup>1</sup> University of Maryland Eastern Shore, <sup>2</sup> Maryland Cooperative Extension, <sup>3</sup> WMREC.
62	1:45	Demographic factors influencing consumer preference of chevon products. G. Kannan* <sup>1</sup> , M. C. Nelson <sup>1</sup> , T. E. Hollis <sup>1</sup> , T. D. Pringle <sup>2</sup> , and K. W. McMillin <sup>3</sup> , <sup>1</sup> Fort Valley State University, <sup>2</sup> The University of Georgia, <sup>3</sup> Louisiana State University AgCenter.
63	2:00	Objective and subjective evaluations of value-added chevon and beef products. K. R. Eega* <sup>1</sup> , K. M. Gadiyaram <sup>1</sup> , G. Kannan <sup>1</sup> , V. R. Gutta <sup>1</sup> , T. D. Pringle <sup>2</sup> , and K. W. McMillin <sup>3</sup> , <sup>1</sup> Fort Valley State University, <sup>2</sup> The University of Georgia, <sup>3</sup> Louisiana State University AgCenter.
64	2:15	Production of Dorper × St. Croix White and St. Croix White lambs grazing pasture during the wet season in the US Virgin Islands. R. E. Dodson*, A. J. Weis, and R. W. Godfrey, Agricultural Experiment Station, University of the Virgin Islands.
65	2:30	Effect of feeding regimens on growth, leptin, and carcass composition in meat-type goats raised in Missouri. E. Walker* <sup>1</sup> , W. Walker* <sup>1</sup> , N. Whitley <sup>2</sup> , C. Stahl <sup>3</sup> , D. Keisler <sup>3</sup> , and E. Berg <sup>3</sup> , <sup>1</sup> Southwest Missouri State University, <sup>2</sup> University of Maryland, Eastern Shore, <sup>3</sup> University of Missouri.
	2:45	Break

## Small Ruminant Production IV

### Production and Feeds

Room: Statehouse Ballroom B

Tuesday 3:00–5:00

Chair: Bob Godfrey, University of the Virgin Islands,  
Kingshill, St. Croix, VI

Abstract	Time	
66	3:00	Nitrogen fertilizer rates on wheat pastures for goats in north Texas. D. Pawelek <sup>*1</sup> , J. P. Muir <sup>1</sup> , and B. D. Lambert <sup>1,2</sup> , <sup>1</sup> Texas Agricultural Experiment Station, <sup>2</sup> Tarleton State University.
67	3:15	Preference of grazing goats for cool-season annual clovers. T. H. Terrill <sup>*1</sup> , W. F. Whitehead <sup>1</sup> , B. P. Singh <sup>1</sup> , S. Gelaye <sup>1</sup> , G. Durham <sup>2</sup> , and C. S. Hoveland <sup>2</sup> , <sup>1</sup> Fort Valley State University, <sup>2</sup> The University of Georgia.
68	3:30	Performance by goats and sheep consuming a 65% concentrate diet subsequent to co-grazing of grass/forb pastures at different stocking rates. G. Anmut <sup>*1,2</sup> , A. L. Goetsch <sup>1</sup> , G. E. Aiken <sup>3</sup> , R. Puchala <sup>1</sup> , G. Detweiler <sup>1</sup> , C. R. Krehbiel <sup>2</sup> , R. C. Merkel <sup>1</sup> , T. Sahlu <sup>1</sup> , L. J. Dawson <sup>4</sup> , and Z. B. Johnson <sup>5</sup> , <sup>1</sup> E (Kika) de la Garza American Institute for Goat Research, Langston University, <sup>2</sup> Animal Science Department, Oklahoma State University, <sup>3</sup> USDA ARS Dale Bumpers Small Farms Research Center, <sup>4</sup> College of Veterinary Medicine, Oklahoma State University, <sup>5</sup> Department of Animal Science, University of Arkansas.
69	3:45	Growth performance of weaned fallow deer fawns ( <i>Dama dama</i> ) is unaffected by Cattle-Ase <sup>TM</sup> supplementation. L. Jonovich <sup>*</sup> , S. Mapel, D. Neuendorff, A. Lewis, and R. Randel, Texas Agricultural Experiment Station.
70	4:00	Energy utilization by lactating Alpine goats: dietary concentrate level and stage of lactation. I. Tovar-Luna <sup>1</sup> , A. L. Goetsch <sup>*1</sup> , R. Puchala <sup>1</sup> , T. Sahlu <sup>1</sup> , S. P. Hart <sup>1</sup> , and Z. B. Johnson <sup>2</sup> , <sup>1</sup> E (Kika) de la Garza Institute for Goat Research, Langston University, <sup>2</sup> Department of Animal Science, University of Arkansas.
71	4:15	The relationship between heart rate and energy expenditure in growing crossbred Boer and Spanish wethers. R. Puchala <sup>*</sup> , I. Tovar-Luna, A. L. Goetsch, and T. Sahlu, E (Kika) de la Garza American Institute for Goat Research.
72	4:30	Evaluating the relationship between temperament and production traits of hair sheep. V. McSween <sup>*</sup> , R. W. Godfrey, R. E. Dodson, and A. J. Weis, Agricultural Experiment Station, University of the Virgin Islands.
73	4:45	Production and marketing recommendations for profitable goat production in West Virginia. D. Singh-Knights <sup>*</sup> and M. Knights, West Virginia University.

# Southern Section American Society of Animal Science

## Past Presidents

2003-05	K. L. Esbenshade	NC State University
2002-03	D. K. Aaron	University of Kentucky
2001-02	T. R. Troxel	University of Arkansas
2000-01	L. L. Southern	Louisiana State University
1999-00	R. P. Wettemann	Oklahoma State University
1998-99	J. D. Armstrong	Purdue University
1997-98	D.G. Ely	University of Kentucky
1996-97	P.R. Harms	Texas A&M University
1995-96	P.R. Utley	University of Georgia
1994-95	D.S. Buchanan	Oklahoma State Univ.
1993-94	P.R. Nolan	University of Arkansas
1992-93	D.R. Marple	Auburn University
1991-92	R.W. Harvey	NC State University
1990-91	D.E. Franke	Louisiana State Univ.
1989-90	A.L. Eller, Jr.	VPI & SU
1988-89	C.R. Long	Texas A&M University
1987-88	D.G. Spruill	University of Georgia
1986-87	G.L. Cromwell	University of Kentucky
1985-86	B. Baker, Jr.	Mississippi State Univ.
1984-85	C.B. Ammerman	University of Florida
1983-84	W.G. Luce	Oklahoma State Univ.
1982-83	J.R. Hill	Clemson University
1981-82	J.W. Turner	Louisiana State Univ.
1980-81	A.M. Sorenson	Texas A&M University
1979-80	W.C. McCormick	University of Georgia
1978-79	E.R. Barrick	NC State University
1977-78	R.L. McGuire	Auburn University
1976-77	J.J. Guenther	Oklahoma State Univ.
1975-76	C.J. Brown	University of Arkansas
1974-75	S.L. Hansard	University of Tennessee
1973-74	M. Koger	University of Florida
1972-73	J.P. Fontenot	VPI & SU
1971-72	G.E. Mitchell, Jr.	University of Kentucky
1970-71	L.S. Pope	Texas A&M University
1969-70	L.C. Ulberg	NC State University
1968-69	R.C. Carter	VPI & SU
1967-68	G.L. Robertson	Louisiana State Univ.
1966-67	C.E. Lindley	Mississippi State Univ.
1965-66	R.F. Sewell	University of Georgia
1964-65	W.M. Warren	Auburn University
1963-64	R.F. Wheeler	Clemson University
1962-63	E.J. Warrick	USDA
1961-62	G.K. Davis	University of Florida
1960-61	W. Gifford	University of Arkansas
1959-60	J.A. Whatley	Oklahoma State Univ.
1957-58	B.L. Southwell	University of Georgia
1956-57	W.P. Garrigus	University of Kentucky
1955-56	J.C. Miller	Texas A&M University
1954-55	R.A. Damon	Louisiana State Univ.
1953-54	A.E. Cullison	University of Georgia

1952-53	C.M. Kincaid	VPI & SU
1951-52	R.S. Glasscock	University of Florida
1950-51	H.H. Levek	Mississippi State Univ.
1949-50	J.E. Foster	University of Maryland
1948-49	H.M. Briggs	Oklahoma State Univ.
1947-48	E.C. Godbey	Clemson University
1946-47	J.C. Grimes	Auburn University
1941-42	R.E. Hunt	VPI & SU
1940-41	M.G. Snell	Louisiana State Univ.
1939-40	L.E. Richardson	University of Tennessee
1938-39	E.W. Sheets	USDA
1937-38	L.I. Case	NC State University
1936-37	M.P. Jarnigan	University of Georgia
1935-36	J.B. Francioni	Louisiana State Univ.
1934-35	A.L. Shealy	University of Florida
1933-34	L.V. Starkey	Clemson University
1932-33	W.L. Blizzard	Oklahoma State Univ.

American Society of Animal Science  
Distinguished Service  
Award Recipients

2004	Don G. Ely	Kentucky
2003	Don E. Franke	Louisiana
2002	Fred Thrift	Kentucky
2001	Robert Wettmann	Oklahoma
2000	Philip Utley	Georgia
1999	Paul R. Noland	Arkansas
1998	Not Given	
1997	William G. Luce	Oklahoma
1996	Raymond W. Harvey	North Carolina
1995	Gary L. Cromwell	Kentucky
1994	George E. Mitchell, Jr.	Kentucky
1993	L.E. McDowell	Florida
1992	Joseph Fontenot	Virginia
1991	Robert Totusek	Oklahoma
1990	Virgil Hays	Kentucky
1989	Frank Baker	Arkansas
1988	Clarence B. Ammerman	Florida
1987	Lowell E. Walters	Oklahoma
1986	Lemuel Goode	North Carolina
1985	O.M. Hale	Georgia
1984	L.C. Ulberg	North Carolina
1983	C.J. Brown	Arkansas
1982	W.C. McCormick	Georgia
1981	Elliot R. Barrick	North Carolina
1980	J.A. Whatley, Jr.	Oklahoma
1979	Marvin Koger	Florida
1978	Thomas J. Marlowe	Virginia
1977	Sam Hansard	Tennessee
1976	J.C. Hillier	Oklahoma
1975	J.K. Riggs	Texas
1974	T.J. Cunha	Florida
1973	O.D. Butler	Texas
1972	George W. Litton	Virginia
1971	Ray H. Dutt	Kentucky
1970	Robert C. Carter	Virginia
1969	Henry H. Leveck	Mississippi
1968	Wesley P. Garrigus	Kentucky
1967	Byron L. Southwell	Georgia

1966 Charles S. Hobbs Tennessee

### American Society of Animal Science

#### Extension Award Recipients

2004	Roger L. McCraw	North Carolina
2003	Darrh Bullock	Kentucky
2002	Warren Gill	Tennessee
2001	Walter R. Burris	Kentucky
2000	Tom R. Troxel	Arkansas
1999	George V. Davis, Jr.	Arkansas
1998	G. L. Monty Chappel	Kentucky
1997	Steven H. Umberger	Virginia
1996	Clyde D. Lane, Jr.	Tennessee
1995	John T. Johns	Kentucky
1994	David W. Freeman	Oklahoma
1993	J.R. Jones	North Carolina
1992	James B. Neel	Tennessee
1991	Keith Lusby	Oklahoma
1990	Joe Hughes	Oklahoma
1989	Henry Webster	Clemson
1988	Donald R. Gill	Oklahoma
1987	H. John Gerken, Jr.	Virginia
1986	M.K. Cook	Georgia
1985	W.G. Luce	Oklahoma
1984	Charles Cooper	Virginia
1983	C.W. Absher	Kentucky
1982	C.M. Triplett	Georgia
1981	Arden N. Huff	Virginia
1980	A.L. Eller, Jr.	Virginia

### American Society of Animal Science

#### Academic Quadrathlon Winners

2004	University of Kentucky
2003	Texas A&M University
2002	University of Florida
2001	University of Kentucky
2000	Texas A&M University
1999	University of Kentucky
1998	University of Kentucky
1997	Oklahoma State University
1996	Oklahoma State University
1995	Virginia Tech
1994	Oklahoma State University
1993	Texas A&M University
1992	Oklahoma State University
1991	University of Kentucky
1990	Virginia Tech
1989	Oklahoma State University
1988	Texas A&M University
1987	University of Georgia
1986	University of Georgia
1985	University of Kentucky
1984	Texas A&M University

### American Society of Animal Science

#### Young Animal Scientist

#### Award Recipients

2004 <sup>1</sup>	Todd See	NC State University
-------------------	----------	---------------------

2004 <sup>2</sup>	Theo Van Kempen	NC State University
2003 <sup>1</sup>	Sam Jackson	Texas Tech University
2003 <sup>2</sup>	Tom Spencer	Texas A&M University
2002 <sup>1</sup>	Joel Yelich	University of Florida
2002 <sup>2</sup>	Beth Kegley	University of Arkansas
2001 <sup>1</sup>	Shawn Ramsey	Texas A&M University
2001 <sup>2</sup>	Jason Apple	University of Arkansas
2000 <sup>1</sup>	Andy D. Herring	Texas Tech University
1999 <sup>2</sup>	Chad C. Chase, Jr.	USDA,ARS
1998 <sup>1</sup>	Markus F. Miller	Texas Tech University
1998 <sup>2</sup>	Arthur L. Goetsch	Langston University
1997 <sup>1</sup>	Tim Marshall	University of Florida
1996 <sup>1</sup>	William L. Flowers	NC State University
1996 <sup>2</sup>	Markus F. Miller	Texas Tech University
1995 <sup>1</sup>	Craig H. Wood	University of Kentucky
1995 <sup>2</sup>	Jeffrey D. Armstrong	NC State University
1994 <sup>1</sup>	Debra K. Aaron	University of Kentucky
1994 <sup>2</sup>	Peter J. Hansen	University of Florida
1993 <sup>1</sup>	Kevin Pond	NC State University
1993 <sup>2</sup>	Rod Geisert	Oklahoma State Univ.
1992 <sup>1</sup>	David S. Buchanan	Oklahoma State Univ.
1992 <sup>2</sup>	James L. Sartin	Auburn University
1991 <sup>1</sup>	W.E. Beal	VPI & SU
1991 <sup>2</sup>	Wayne Greene	Texas A&M University
1990 <sup>1</sup>	J.W. Mabry	University of Georgia
1990 <sup>2</sup>	T.H. Welsh	Texas A&M University
1989	J.W. Spears	NC State University
1988	S.B. Smith	Texas A&M University
1987	D.L. Thompson, Jr.	Louisiana State Univ.
1986	G.J. Hausman	USDA, ARS, Athens, GA
1985	J.W. Savell	Texas A&M University
1984	D.R. Notter	VPI & SU
1983	T.S. Stahly	University of Kentucky
1982	D.N. Marple	Auburn University

<sup>1</sup>Education

<sup>2</sup>Research

#### NPB Swine Industry Award Recipients

2004	Jason Apple	University of Arkansas
2003	Theo van Kempen	NC State University
2002	Kim Cole	University of Arkansas
2001	G. E. Conatser	University of Tennessee
2000	Not given	
1999	Not given	
1998	Robert A. Cushman	NC State University
1997	M. Todd See	NC State University
1996	William L. Flowers	NC State University
1995	M. Todd See	NC State University
1994	Robert Dove	University of Georgia

#### American Society of Animal Science Graduate Student Paper Award Recipients

<b>Year</b>	<b>Awardee</b>	<b>Place of Meeting</b>	<b>University</b>
2004	E. G. Brown	Tulsa	Texas A&M University
2003	C. Realini	Mobile	Univ. of Georgia
2002	J. A. Parish	Orlando	Univ. of Georgia
2001	J. Montgomery	Ft. Worth	Texas Tech University
2000	M. R. Stivarious	Lexington	University of Arkansas
1999	T. E. Engle	Memphis	NC State University
1998	C. Barnett	Little Rock	Univ. of Tennessee
1997	D.H. Crews, Jr.	Birmingham	Louisiana State Univ.
1996	None Given		
1995	E.B. Kegley	New Orleans	NC State University
1994	R.D. Coffey	Nashville	University of Kentucky
1993	D.K. Bishop	Tulsa	Oklahoma State Univ.
1992	R.L. Stanko	Lexington	NC State University
1991	G.A. Rohrer	Ft. Worth	Texas A&M University
1990	K.A. Meurer	Little Rock	Mississippi State Univ.
1989	G.M. Davenport	Nashville	University of Kentucky
1988	M.J. Esteinne	New Orleans	University of Georgia
1987	T.W. Burnell	Nashville	University of Kentucky
1986	M.J. Wylie	Orlando	Texas A&M University
1985	M.W. Richards	Biloxi	Clemson University
1984	J.C. Betts	Nashville	Texas A&M University
1983	J.B. Lutz	Atlanta	University of Georgia
1982	K.R. Pond	Orlando	Texas A&M University
1981	L.W. Greene	Atlanta	VPI & SU
1980	D.K. Aaron	Hot Springs	University of Kentucky
1979	T.W. Robb	New Orleans	University of Kentucky
1978	E.F. Gray	Houston	University of Kentucky
1977	T.A. Puglisi	Atlanta	University of Georgia
1976	D.L. Thomas	Mobile	Oklahoma State Univ.
1975	J.C. Cornwell	New Orleans	Louisiana State Univ.
1974	D.M. Hallford	Memphis	Oklahoma State Univ.

1973	A.C. Mills	Atlanta	University of Florida
1972	C. McLellan, Jr.	Richmond	Oklahoma State Univ.
1971	C.L. Fields	Jacksonville	University of Kentucky
1970	A.R. Bellve	Memphis	NC State University
1969	W.L. Brown	Mobile	Auburn University
1968	W.E. Powell	Louisville	Auburn University
1967	F.W. Bazer	New Orleans	NC State University
1966	D.G. Ely	Jackson	University of Kentucky
1965	R.D. Goodrich	Dallas	Oklahoma State Univ.
1964	C.K. Vincent	Atlanta	NC State University
1963	C.B. Ramsey	Memphis	Univ. of Tennessee
1962	J.R. Crockett	Jacksonville	University of Florida

American Society of Animal Science  
Undergraduate Student Paper Award Recipients

<b>Year</b>	<b>Awardee</b>	<b>Place of Meeting</b>	<b>University</b>
2004	J. L. Roberts	Tulsa	Oklahoma State University
2003	M. Seitz	Mobile	Mississippi State Univ.
2002	B. Spader	Orlando	University of Missouri
2001	R. Horsley	Ft. Worth	Virginia Polytechnic Univ.
2000	B. Robbins	Lexington	Virginia Tech
1999	J. L. Bardugone	Memphis	Virginia Tech
1998	S. F. Flohr	Little Rock	Virginia Tech
1997	T.M. Weick	Birmingham	Louisiana State Univ.
1996	K. J. Goodson	Greensboro	Texas A&M University
1995	B. C. Bloom	New Orleans	Auburn University
1994	Beth Good	Nashville	Oklahoma State Univ.
1993	C.J. Kirby	Tulsa	NC State University

2005 SOUTHERN SECTION ASAS  
COMMITTEES  
Program Committees

Pasture and Forages

Andrae, J, GA  
Gill, W, TN  
Rouquette, FM, TX  
Arthington, JD, FL

Breeding and Genetics

DeRouen, S, LA  
Dzakuma, J, TX  
Johnson, Z, AR  
Herring, A, TX

Extension

Hall, J, VA  
Johns, J, KY  
Arthington, J, FL

Meats

Duckett, S, GA  
Apple, J, AR  
Morgan, B, OK

Physiology

Estienne, M, VA  
Vann, R, MS  
Hall, J, VA  
Rude, B, MS

Ruminant Animal Production

Brown, M, TX  
Anderson, L, KY  
Spears, J, NC  
Ward, J, LA

Small Ruminant Production

Burke, J, AR  
Jackson, S, TX  
Hart, SP, OK  
Godfrey, B, VI

Teaching and Undergraduate Education

Fernandez, JM, LA  
Brown, AH, Jr., AR

Moore, J, NC  
Garcia, M, TX

## Other Committees

Executive  
Esbenshade, KL, NC  
Randel, RD, TX  
Coleman, DA, AL  
Chase, CC, FL  
Aaron, D.K, KY

Advisory  
Wettman, R, OK  
Hembry, G, FL  
Troxel, TR, AR  
Kiser, T, MS  
Browning, R, TN  
Morrison, D, LA

Nomination  
Getz, W, GA  
Troxel, TR, AR  
Hembry, G, FL  
Kiser, T, MS

Resolutions  
Neel, J, TN  
Wettman, R, OK

### Distinguished Service Award

Fontenot, J, VA  
Ammerman, C, FL  
Cromwell, G, KY  
Franke, D, LA  
Ely, D, KY

Graduate Student Award

Brooks, C, TX  
Franke, D, LA  
Schmidt, S, AL  
Willard, S, MS  
Coffey, K, AR

Young Animal Scientist

Award - Research  
Apple, J, AR  
Kegley, E., AR  
Wetteman, R, OK  
Spencer, T, TX  
Rankins, D, AL

Young Animal Scientist

Award - Education  
Ramsey, S, TX  
Yelich, J, FL  
Rosenkrans, C, AR  
Jackson, S, TX  
See, T, NC

Extension Award

Lane, C, TN  
Randel, R, TX  
Gill, W, TN  
Bullock, D, KY  
McCraw, R, NC

NPB Award

Randel, R, TX  
Harper, A, VA  
Sterle, J, TX

Academic Quadrathlon

Sterle, J, TX  
Yelich, J, FL  
Kriese Anderson, L, AL  
Carter, S, OK  
Rosenkrans, C, AL

Necrology

Brown, AH, Jr., AR