

and a written, multiple-choice examination. Statistical analysis of survey data was performed using the UNIVARIATE procedure in SAS (v9.2). 94% of the participants passed the certification requirements of the program, and overall subject matter knowledge increased by 36%. Likert scale responses (1 = very little, 2 = little, 3 = some, 4 = much, 5 = very much) regarding knowledge of 14 subject matter topics before (2.89 ± 0.11) and after (3.83 ± 0.07) indicated a mean increase of 0.91 ± 0.09 units. Subject matter knowledge with a > 1 unit increase included cattle (1.40 ± 0.15) and equine (1.43 ± 0.14) body condition scoring, equine behavior (1.00 ± 0.15) and learning lab (1.07 ± 0.12), and animal nutrition (1.13 ± 0.11). Likert scale responses (1 strongly disagree, 2 disagree, 3 neutral, 4 agree, 5 strongly agree) indicated the usefulness of information to participants when working in the field (4.20 ± 0.10), whether participants feel better prepared to respond (4.20 ± 0.08), and whether instructors presented the material clearly (4.34 ± 0.07). The LECAL program addresses specific core curriculum to improve LEOs knowledge and skills. Utilization of the LECAL program by Florida LEOs could result in a savings of nearly \$2,500 per client compared to other national certifying services.

Key Words: law enforcement, livestock, training
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0583 Benchmark demographics of the Mississippi feeder calf board sale program. E. A. Caldwell^{*1}, B. B. Karisch¹, J. M. Riley², and J. A. Parish³,
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The semi-annual Mississippi feeder calf board sale program serves as an opportunity for beef cattle producers to build a more successful marketing strategy in the feeder cattle sector. The board sales encourage more uniform load-lots in addition to reduced shrink, handling, and comingling before shipping due to the off-site marketing of calves. Established in 2008, the program has recorded 309 total lots sold consisting of nearly 25,000 heads of cattle, with the receipts from these sales exceeding \$19 million. To examine benchmark values of the board sale program, lot demographics of each sale were analyzed using the Proc Means procedure of SAS. Frequencies of hide color characteristics reveal that 92.6% of all lots sold advertised some percentage of black-hided cattle, followed by 47.2% of lots with smoke color, 43% with red, and 18.1% with white color. Specifically, 64% of all lots consisted of at least 75% black cattle, 36.6% of lots contained less than 25% red cattle, and 34% contained less than 25% cattle with smoke hide color. Lots marketed with Brahman influence represent 14.2% of lots sold. The mean weighted average lot body weight per calf across all years was 315.3 ± 4.4 kg. Results show that 0.3% of lots had a weighted average body weight per calf of less than 226.8 kg, 5.9% weighed

226.8 to 271.2 kg, 47.6% weighed 272.2 to 317.1 kg, 30.6% weighed 317.5 to 362.4 kg, 15.3% weighed 362.9 to 407.8 kg, and 0.3% weighed more than 408.2 kg. Mixed gender lots comprised 45.3% of all lots sold, followed by steer-only lots at 33.7% and heifer-only lots at 21%. Use of growth-promoting implants was advertised for 12.6% of total lots, whereas 20.4% of lots marketed cattle produced without growth promotants. Participation results indicate fewer lots per sale since 2008 accompanied by a slight increase in number of heads per sale due to increased number of heads per lot sold. Furthermore, price trends of the board sale program indicate a steady increase in selling price throughout its history. In summary, the Mississippi feeder calf board sale program continues to provide producers a viable alternative marketing strategy. The specific attributes of each lot are central to its selling value, as consistent and industry-recognizable lot characteristics may bring premiums at sale.

Key Words: board sale, feeder calf, marketing
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0584 The show-me-select replacement heifer program: adding value to beef herds in Missouri.

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The Missouri Show-Me-Select Replacement Heifer Program was designed to improve reproductive efficiency of beef herds in Missouri and increase individual farm income. During the past 18 yr, 822 farms enrolled 122,970 heifers in the program. Regional extension livestock specialists work closely with the 243 veterinarians involved with the program state wide. State specialists provide program support to regional extension field staff and participating veterinarians. The marketing component of the program facilitated the sale of 30,539 heifers in 141 sales from 1997 through sales in 2015. These sales generated interest from 9484 prospective buyers that formally registered to buy heifers and 3366 individuals that purchased heifers from the various sales. Heifers from the program have now sold to farms in 19 states. Collectively, 141 sales have generated \$42,984,650 in gross sales. A Tier Two classification was created recently that distinguishes heifers from genetically superior high accuracy sires. Using data from the Fall 2015 sales, in which Tier Two heifers sold, we may consider opportunities for producers to add value to their heifers as a result of improvements in genetic merit. Using the average sales price of Show-Me-Select qualified heifers carrying a natural-service sired pregnancy as a baseline sale average, we can make the following comparisons to determine the relative added value that resulted from improvements in genetics of the heifer and/or the pregnancy the heifer was carrying: Show-Me-Select heifers carrying natural-service sired pregnancies sold for an average sale price per heifer of \$2,242;

Show-Me-Select heifers carrying AI-sired pregnancies sold for an average sale price per heifer of \$2,437, adding \$195 per heifer; Tier Two Show-Me-Select heifers carrying natural-service sired pregnancies sold for an average sale price per heifer of \$2,371, adding \$129 per heifer; and Tier Two Show-Me-Select heifers carrying AI-sired pregnancies sold for an average sale price per heifer of \$2,664, adding \$422 per heifer. The Missouri Show-Me-Select Replacement Heifer Program is the first statewide on-farm beef heifer development and marketing program of its kind in the U.S. Impact on Missouri's economy that resulted from the past 18 yr of the Show-Me-Select program now exceeds \$110M.

Key Words: added value, beef heifer, extension program
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and 126 producers provided enough information to allow the researchers to calculate the costs of pre- and post-milking teat disinfectants per cow per day, respectively. Two hundred seventeen producers provided the researchers enough information to determine the cost of intramammary antibiotics per mastitis case. Only 52 and 3 producers provided enough information to calculate the costs of environmental and contagious mastitis vaccines per cow, respectively. When estimating the cost of clinical and subclinical mastitis, 241 and 208 producers provided a numerical estimate, respectively. Remaining producers either did not know or did not provide an estimate. These results provide new insights into producer perception of mastitis and milk quality economics.

Key Words: costs, mastitis, milk quality, SQMI
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0585 Perceived mastitis costs and milk quality management practices among Southeastern United States dairy producers. D. T. Nolan^{*1}, C. Blakely², P. D. Krawczel², C. S. Petersson-Wolfe³, G. M. Pighetti², A. Stone¹, S. Ward⁴, and J. M. Bewley¹, ¹University of Kentucky, Lexington, ²University of Tennessee, Knoxville, ³Virginia Tech University, Blacksburg, ⁴Mississippi State University, Mississippi State.

Researchers from four universities in the southeastern United States completed 175-question surveys on 282 farms in TN ($n = 83$), KY ($n = 96$), VA ($n = 96$), and MS ($n = 7$) from June 22, 2014 to June 21, 2015 as a part of the Southeast Quality Milk Initiative project. The objective of this study was to analyze questions focusing on the costs associated with milk quality management and to quantify dairy producer estimates of mastitis costs. The MEANS procedure in SAS 9.3 (SAS Institute, Cary, NC) was used to summarize costs of pre- and post-milking teat disinfectants, intramammary antibiotics for mastitis treatment, vaccinations, and producer estimates of subclinical and clinical mastitis costs. The average costs associated with specific management practices and producer estimates of mastitis costs are presented in Table 1. One hundred twenty-four

0586 Development of a web-based calendar tool for scheduling beef cow management activities. D. Poddaturi¹, S. Johnson^{*2}, G. R. Dahlke¹, D. A. Blasi³, and G. Hanzlicek⁴, ¹Iowa State University, Ames, ²Kansas State University, Colby, ³Department of Animal Science and Industry, Kansas State University, Manhattan, ⁴Kansas State Veterinary Diagnostic Laboratory, Manhattan.

Extension efforts often remind producers of timely management practices and their value. Recommendations must revolve around presumed average time of activities, such as calving and weaning. The objective of the current project was to develop a web-based cow/calf management tool to create a customizable yearly production calendar. The Management Minder (MM) was designed for beef cattle producers to facilitate the timely implementation of routine management steps to optimize health, nutrition, reproduction, and general management. The MM helps beef producers schedule routine activities based on default intervals from the appropriate date category (calving/breeding, weaning, grass turnout, and receiving cattle), and communicate these events to other members of the management team. An automatic portion adds all of the activities in a particular category and a check box is used

Table 0585.

Table 1: Average cost estimates among dairy producers for mastitis control practices and perceived costs of mastitis cases.

	Mean	Standard Deviation	Median
Pre-dip cost/cow/d	\$0.04	\$0.04	\$0.03
Post-dip cost /cow/d	\$0.06	\$0.05	\$0.04
Intramammary antibiotic cost/mastitis case	\$14.85	\$10.84	\$12.67
Environmental vaccine cost/cow/lactation	\$3.43	\$4.60	\$3.00
Contagious vaccine cost/cow/lactation	\$3.30	\$1.98	\$3.60
Cost estimate of clinical mastitis ¹	\$288.00	\$520.25	\$175.00
Cost estimate of subclinical mastitis ²	\$301.00	\$746.83	\$150.00

¹Cost estimate made by producer for a clinical case of mastitis

²Cost estimate made by producer for a subclinical case of mastitis

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