Supplemental copper may reduce subcutaneous fat and increase polyunsaturated lipid content within muscles. Supplemental selenium appears to increase blood and tissue selenium but does not appear to improve retail shelf life outcomes. Supplemental zinc may increase subcutaneous and internal fat depots; zinc source also appears to influence fat deposition. Supplemental chromium may increase LM area and decrease dressed carcass yield and yield grade.

Supplemental Na, Cl, Mg, Co, I, Fe, and Mn does not appear to be in the literature in reference to beef quality.

Key words: vitamin, mineral, beef carcass

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SYMPOSIUM ABSTRACTS: COW-CALF PRODUCTION IN THE SOUTHEASTERN US: POTENTIAL FOR IMPACT AND ECONOMIC SUSTAINABILITY

123 Economic Issues for Southeast Cow-Calf Production.

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The Southeast has produced as much as 46.5% of the nation's beef cows in the past. Changing land use in the South, drought, age of producers, and competing land uses have reduced the number of beef cows in the South. But, drought and changing land use in other parts of the country, and sustainability interests have provided some opportunities for cow-calf production in the Southeast. Renewed interest in grazing systems has highlighted the importance of economic performance of these alternatives. New applied research on other cow-calf production systems may increase the productivity of the Southern cow-calf industry. This work examines changes in economic performance and future economic issues for cow-calf producers in the Southeast.

Key words: economics, beef, cattle

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124 An overview of cow-calf production in the southeast: forage systems, cow numbers, and calf marketing strategies.

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Characterization of cattle numbers and forage resources in the southeast are necessary to help evaluate research and extension needs and provide insight into the current and future potential economic status of this diverse and highly productive region. For the purposes of this presentation the southeast will be defined by the 12 states that are members of the American Society of Animal Science Southern Section. In order of greatest to least number of beef cows that have calved these states include: Texas, Oklahoma, Kentucky, Florida, Tennessee, Arkansas, Alabama, Georgia, Mississippi, Louisiana, North Carolina, and South Carolina. According to the January 1, 2015, USDA inventory report there are approximately 14,392.0 million beef cows in the southeast. This would represent 48.5% of the total 29,693.1 beef cows that have calved in the US. For comparison 50.9%, 49.1%, 52.1%, and 50.2% of the beef cows were located in the southeast in 1995, 2000, 2005, and 2010, respectively. Generally speaking at these 5-yr intervals most states have increased or decreased over time depending on weather and other local conditions. However, it is important to note that 3 states (Georgia, Mississippi, and South Carolina) have shown a steady decrease in cow numbers at each 5-yr interval. The majority of cattle operations in the southeast are cow-calf producers and their production and calf marketing strategies (e.g., age at weaning, calf size, and target market) vary tremendously. Stocker operations represent an important and fluid enterprise in the southeast that varies in size and scope depending on market conditions and geography. According to the most recent report from the USDA Economic Research Service on major land uses in the US there are approximately 144,777 million acres of grassland pasture and range in the 12 southern states; this represents 23.6% of the total 612,257 million acres in the US. While there is large amount of rangeland located in the western portions of Texas and Oklahoma, the majority of cow-calf operations in the southeast are based on introduced perennial forages. Primary perennial forages would include bermudagrass and bahiagrass in the south with fescue becoming more present moving north from the gulf coast. Additionally, over seeded winter annual forages, especially ryegrass, are commonly used by both cow-calf and stocker operators in the region.

Key words: southeast, cattle, forages

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