

## **Factors Affecting Lot CAB<sup>®</sup> Acceptance Rate of Beef Calves in the Iowa Tri-County Steer Carcass Futurity**

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Two hundred twenty lots of beef calves that participated in the 2003 through 2007 Iowa State University Tri-County Steer Carcass Futurity were analyzed to determine factors affecting Certified Angus Beef<sup>®</sup> (CAB<sup>®</sup>) acceptance rate. Lot CAB<sup>®</sup> acceptance rate was based on the new CAB<sup>®</sup> requirements and calculated by dividing the number of CAB<sup>®</sup> carcasses in the lot by the number of calves in the lot that were CAB<sup>®</sup> eligible based on hide color. Lot CAB<sup>®</sup> acceptance rate was influenced by the following factors describing the lot: year of harvest, gender of calves, season of harvest, percent Angus, feedlot delivery weight, feed efficiency, and average daily gain ( $P < .05$ ). Lot CAB<sup>®</sup> acceptance rate was similar in each year from 2003 through 2006 but was significantly lower in 2007 than in all previous years. Heifers had a higher CAB<sup>®</sup> acceptance rate (31.7%) when compared with steers (16.9%) or mixed gender lots (18.1%). Cattle that were harvested in the October through December time frame had a lower CAB<sup>®</sup> acceptance rate (13.6%) than those harvested from January through March, April through June, or July through September (27.0%, 25.7%, and 22.6%, respectively). As the percentage of Angus genetics in the lot increased, the lot CAB<sup>®</sup> acceptance rate increased. Cattle that arrived at the feedlot at lighter weights had higher CAB<sup>®</sup> acceptance rates than heavier cattle. Lots of calves that were less efficient in converting feed to gain had higher CAB<sup>®</sup> acceptance rates. Lot CAB<sup>®</sup> acceptance rate increased as average daily gain increased. Factors that did not have a significant effect on lot CAB<sup>®</sup> acceptance rate in this study were: mud score at final sort, individual treatment cost per head, number of harvest groups within each lot, days on feed, cost of gain, lot size, geographic region of origin, average disposition score, adjusted final weight, and lot mortality rate ( $P > .05$ ). These data indicate that CAB<sup>®</sup> acceptance rate in beef calves is significantly affected by year of harvest, gender, season of the year at harvest, percent Angus, feedlot arrival weight, feed efficiency, and average daily gain.