Maximizing Forage and Minimizing Grain Intake in Bison Bulls Fed for Meat

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ight bison ranchers in North and South Dakota participated in a North Central Region Sustainable Agriculture funded project to evaluate animal performance, carcass quality, and economic returns when the forage feeding period was lengthened and the grain feeding period was shortened in bison bulls fed for meat. Each rancher compared two treatments with 20 animals included in each treatment. Treatments were initiated at weaning and included 1) grain feeding from weaning to slaughter, 2) hay fed during the winter followed by grain fed to slaughter, 3) hay fed during the winter, grazing during the summer and grain fed to slaughter, and 4) hay fed during the winter, grazing during the summer, hay fed the second winter, and grain fed until slaughter. Extending the forage feeding period and reducing the grain feeding period appeared to have little effect on overall average daily gain and cost per pound of gain for treatments 1, 2, and 3. However, some missing data cells, and other circumstances create concern for the validity of the trial results. Carcass quality was reduced in treatments 3 and 4 and gross return above feed costs were lowest in treatment 4 by over \$100 per head. Producer trials across a wide geographic area with variable genetics and management styles do not produce a uniform data set and can be a challenge when summarizing information. However, data was generated in commercial ranch settings in every case by producers using feeds common to their operations. Another trial under more controlled protocol needs to be conducted to validate the results of this study.