



SOUTH DAKOTA
STATE UNIVERSITY

Department of Animal Science

Beef Day 2020

Feedlot

Effects of wheat straw bedding usage on hide tag scores during winter and spring in finishing feedlot cattle fed in eastern South Dakota

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Objective

Evaluate hide tag scores of finishing cattle subjected to differing levels of bedding application during the winter and spring months in eastern South Dakota.

Study Description

Hide tag scores (TS; 1 to 5 point scale; 1=no tag, clean hide and 5=lumps of manure attached to the hide continuously on the underbelly and side of the animal from brisket to rear quarter) were collected on March 22 or March 25, 2019 (winter), and on May 10, 2019 (spring) from pens of 5 to 8 steers and heifers housed in 25 × 25 ft concrete pens at the Ruminant Nutrition Center in Brookings, SD. Treatments included: 1) 5.5 lb (as-is basis) of bedding per animal per day (HI; n=8 pens); 2) 4 lb (as-is basis) of bedding per animal per day (LO; n=15 pens); or 3) no bedding (NO; n=15 pens). Pen TS distribution was analyzed using a multinomial distribution approach appropriate for a completely randomized design.

Take home points

Winter: There were more steers ($P = 0.01$) with TS 2 in HI compared to LO and NO (42.5 vs. 4.2 and $0.0 \pm 7.27\%$, respectively). Cattle in HI had a greater ($P = 0.01$) number of TS 3 compared to LO and NO (55.0 vs. 25.8 and $5.0 \pm 10.20\%$, respectively). Cattle in LO and NO had more ($P = 0.01$) TS 4 compared to HI (59.2 and 45.6 vs. $2.5 \pm 10.48\%$, respectively). The greatest number ($P = 0.01$) of cattle with TS 5 was in the NO treatment (49.4 vs 10.8 and $0.0 \pm 8.80\%$ for NO, LO, and HI, respectively).

Spring: Steers in HI had the cleanest hides with the greatest number of TS 1 ($P = 0.01$; 5.0 vs. 0.0 and $0.0 \pm 1.56\%$ for HI, NO, and LO, respectively) and TS 2 compared to NO and LO (55.0 vs. 23.7 and $21.4 \pm 7.58\%$ for HI, NO, and LO, respectively). Cattle in HI had fewer ($P = 0.01$) TS 3 compared to NO and LO (37.5 vs. 69.5 and $65.6 \pm 8.40\%$, respectively). No differences ($P \geq 0.13$) for TS's 4 and 5 were detected during the spring.

Greater amounts of bedding results in less severe TS. Tag Scores became less severe as the season changed from winter to spring.

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