

IMPACT OF GRAZING STOCKPILED TALL FESCUE ON LACTATING BEEF COWS

LeAnn Elizabeth Curtis

Dr. Robert L. Kallenbach, Thesis Supervisor

ABSTRACT

Two experiments are described, in which fall-calving cow-calf pairs grazed stockpiled tall fescue at three different endophyte infection levels (20, 51, and 89%) and four forage allowances (2.25, 3.00, 3.75, and 4.50% of BW). A hay feeding treatment was included as a standard for comparison. Each experiment was a randomized complete block design. Average daily gain, BW, BCS decreased as forage allowance decreased and endophyte infection increased. However by weaning, cow BW averaged 528 kg across all treatments. Calf gain was unaffected by endophyte infection level of stockpiled tall fescue, with an ADG of 0.72 kg d⁻¹. Individual calf performance was greatest at forage allowances above 2.25% of BW. However, gain ha⁻¹ was greatest for the 2.25% of BW forage allowance, averaging 155 kg ha⁻¹. A forage allowance of 2.25% of BW is likely the most efficient, since cow weight loss over winter is easily regained, land requirements are low, and calf gain ha⁻¹ is maximized. Additionally, if used for winter stockpiling, renovation of endophyte-infected tall fescue pastures for fall-calving operations is unneeded in most cases.