Grazing beef steers preferred alfalfa over tall fescue in Virginia

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Previous research has suggested that cattle exhibit a partial preference for a legume over a grass regardless of forage species. At Blacksburg, VA, grazing behavior and diet preference of beef steers grazing ‘Jesup’ endophyte-free tall fescue monocultures versus neighboring monocultures of tall fescue and alfalfa at proportions (by ground area) of 50:50, 25:75, and 75:25 were studied.

Steers grazed alfalfa 61 to 65% of the time regardless of the proportion offered, with no diurnal pattern of preference. Steers grazing only tall fescue spent more time ruminating and less time grazing than steers grazing neighboring tall fescue/alfalfa blocks.

Cattle without previous experience eating alfalfa spent 78% of total grazing time eating alfalfa, whereas after having experience grazing alfalfa they spent 72% of total time grazing alfalfa. Overall, the proportion of the day spent grazing was less when alfalfa was novel (40%) than when steers were experienced with both forages (46%). The proportion of grazing time in alfalfa was greater in the afternoon (77%) than in the morning (72%), differing from previous studies that reported a decline in legume preference over the day with an increased grass preference in the afternoon.

Application of neighboring monocultures in grazing systems would benefit from additional research on cattle performance when grazing in this paddock arrangement.