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Heidi Myer
South Dakota State University, heidi.myer@sdstate.edu

Sharon Clay
South Dakota State University, sharon.clay@sdstate.edu

Alexander Smart
South Dakota State University, alexander.smart@sdsu.edu

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H. K. Myer*, S. A. Clay, and A. Smart
Plant Science Department
South Dakota State University
Brookings, SD 57007
*Corresponding author email: heidi.myer@sdstate.edu

ABSTRACT

Mob grazing is a grazing system that uses very high stocking densities of 100,000 pounds per acre or more for short durations of a few hours to one day in small paddocks. Mob grazing has been suggested to increase vegetation usage and minimize selective grazing behavior compared with lower stocking densities in rotational systems. Decreased selectivity increases grazing pressure on plants, such as spiny thistles and tough, woody brush, typically avoided by herbivores. The objective of this project was to determine effects of mob grazing cattle on the selected invasive weeds: musk thistle (*Carduus nutans*), absinth wormwood (*Artemisia absinthium*), and buckbrush (*Symphoricarpos occidentalis*). Cooperating producers in Hayti, Selby, and Chamberlain, South Dakota named their most problematic pasture weeds, listed above. The Hayti site consisted of mob grazed, rotationally grazed, and spray/rotationally grazed treatments; Selby of rotationally grazed and mob grazed treatments; and Chamberlain of ungrazed and mob grazed treatments. The specific problematic weed at each site was permanently tagged along transects. Measurements of surrounding vegetation and weeds were taken before and after grazing. Initial results quantified a decrease in weed volume and height in mob grazed systems; a decrease in surrounding vegetation height, but not weed volume in rotational pastures; and an increase in vegetation height and weed volume for the ungrazed pasture. These data indicate that mob grazing may be a viable method of weed control in South Dakota grazinglands.