

Perceptions of Crop Consultants and Crop Producers on Grazing Corn Residue in Nebraska

Abstract

We conducted a survey to evaluate factors influencing consultant recommendations on grazing and producer grazing practices in Nebraska. Producers who did not graze cited soil compaction, inconvenience (lack of watering and fencing), and lack of access to livestock as major reasons for not grazing. Producers who allowed grazing and consultants who recommended grazing were more likely than those who did not favor grazing to perceive that grazing increased subsequent grain yields. Most consultants and producers reported making decisions on the basis of their personal observations. Findings from the survey can be used for enhanced Extension dissemination and research activities regarding grazing of residues.

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Introduction

Grazing corn residue has been practiced for many years and was researched as early as the 1970s. Vetter, Weber, and Gay (1970) studied the effects of grazing cornstalks on beef cow performance, and Ward (1972) analyzed the feeding value of crop residues. Additionally, the effects of grazing corn residue on subsequent crop yields (Clark et al., 2004; Drewnoski, MacDonald, Erickson, Hanford, & Klopfenstein, 2016) and soil properties (Clark et al., 2004; Tracy & Zhang, 2008) have also been researched. Grazing of corn residue can lower winter feed cost for cattle producers by allowing them to extend the grazing season rather than feed harvested and stored forages (Rasby, Drewnoski, & Stalker, 2014).

Yes, I changed	7
No, I did not change	93

Perceptions of Grazing Effects on Land Productivity

The majority of crop consultants recommended grazing; thus, a statistical analysis comparing those who recommended and those who did not recommend grazing could not be conducted. However, the majority of both crop consultants recommending grazing, and crop producers allowing grazing perceived the effect of grazing on subsequent grain yields to be neutral or positive (Table 2). Producers who did not allow grazing were more likely ($p > .02$) to perceive negative effects of grazing corn residue on subsequent corn yields (Figure 3) and soybean yields (Figure 4) relative to producers who allowed grazing. Using a scale ranging from 1 (*greatest decrease*) to 7 (*greatest increase*), producers who did not allow grazing rated the effect on corn yield at 3.79 ± 1.5 and the effect on soybean yield at 3.86 ± 1.8 , whereas producers who did graze corn residue ranked the effect on corn yield at 4.86 ± 1.2 and the effect on soybean yield at 4.54 ± 1.3 .

Table 2.

Perceptions of Crop Consultants Recommending Grazing and Crop Producers Allowing Grazing on the Effect of Grazing Corn Residue on Subsequent Crop Yield

Crop yield	Consultants recommending grazing ($n = 185$) ^a		Producers allowing grazing ($n = 92$) ^b	
	<i>f</i>	%	<i>f</i>	%
Corn				
Decrease	38	20.6	17	18.5
No effect	75	40.8	46	50.0
Increase	71	38.6	29	31.5
Soybean				
Decrease	28	15.1	17	19.1
No effect	89	48.1	43	48.3
Increase	68	36.8	29	32.6

^aOne crop consultant recommending grazing did not respond to the question regarding corn yield. ^bThree crop producers allowing grazing did not respond to the question regarding soybean yield.

