

Table 1. Summary of management of experiment sites located in Nebraska to evaluate the effect of continuous (CONT) vs. strip-grazing (STRIP) of summer planted annual forages in the fall/winter.

Site	Year	Planting Date	Species	Initial biomass lb/ac	Start Grazing Date	Treatment	Days grazed	Animal Type	Stocking density, lb BW/ac	AUM/ac ¹	Increase in grazing capacity, %	Frequency of moves
East	2020	Early Aug	Oat and Rapeseed mix	4,356	Mid Nov	CONT	83	600 lb steer	560	1.48	-	-
						STRIP	83		21,000	2.75	86%	Twice a week
East	2021	Mid-July	17 species mix with millet and sunflower predominate	2,364	Early Dec	CONT	54	675 lb steer	675	1.20	-	-
						STRIP	54		13,235	1.70	42%	Twice a week
North west	2020	August	Oat and Turnip	-	Late Nov	CONT	44	1400 lb cow	1,225	1.53	-	-
						STRIP	38		9,224	2.12	39%	Once a week
North west	2021	August	Oat and Turnip	-	Early Nov	CONT	73	475 lb heifer	1,676	2.17	-	-
						STRIP	73		8,177	2.44	12%	Once a week
South west	2020	Mid-August	Oat and Rapeseed	989	Early Nov	CONT	7	1400 lb cow	1,300	0.28	-	-
						STRIP	16		5,040	0.61	118%	Twice a week
South central	2020	Early Aug	Oats and Rapeseed	1,164	Early Oct	CONT	26	1400 lb cow	790	0.76	-	-
						STRIP	26		5,287	0.87	14%	Once a week
North east	2021	August	forage sorghum, radish, turnip, pea, vetch, rye, oat, sunflower	2,108	Mid October	CONT	33	1400 lb cow	940	1.40	-	-
						STRIP	56		40,084	1.70	21%	Daily

¹AUM = Animal Unit Month, a 1000-pound animal over a month of time

Table 2. Initial forage species composition and quality of oat-rapeseed mix grazed in the fall/winter in eastern NE

Forage type	Biomass, %	DOM ¹ , %	CP ² , %
Oats	74.5	70.5	8.4
Rapeseed	25.5	80.1	15.8
Forage as offered		72.3	10.3

¹DOM = Digestible Organic Matter, a proxy for TDN (energy)

²CP = Crude Protein

Table 3. Carrying capacity and performance of steers grazing an oat-rapeseed mix continuously (CONT) or strip-grazed (STRIP) over an 83 d period in the fall/winter in eastern NE

Variable	CONT	STRIP	SEM	<i>P</i> -value
Initial BW, lb	524	524	0.6	0.54
Final BW, lb	687	661	2.7	0.01
ADG, lb	1.98	1.67	0.025	0.01
AUM/ac ¹	1.49	2.71	0.156	0.03
Gain, lb/ac	148	232	9.3	0.02
Cost of gain, \$/lb	0.62	0.52	0.26	0.11

¹AUM = Animal Unit Month, a 1000-pound animal over a month of time

Table 4. Initial forage species composition and quality of 17 species mix grazed in the winter in eastern NE.

Forage type	Biomass, %	DOM ¹ , %	CP ² , %
Grasses ³	72.6	52.5	5.7
Grass seedheads ⁴	12.6	65.1	9.9
Legumes ⁵	4.4	66.1	17.1
Forbs ⁶	8.6	45.6	6.8
Sunflower heads	1.8	63.9	10.9
Forage as offered	--	54.2	6.9

¹DOM = Digestible Organic Matter, a proxy for TDN (energy)

²CP = Crude Protein

³ mostly pearl, german and browtop millet

⁴ german and browtop millet

⁵ cowpea, mungbean, spring pea and vetch

⁶ mostly sunflower stems

Table 5. Forage biomass and disappearance of summer planted 17 species mix when continuously grazed (CONT) or strip-grazed (STRIP) in the fall/winter in eastern NE

Variable	CONT	STRIP	SEM	P-Value
Initial biomass, lb/ac	2,509	2,219	213	0.44
Final biomass, lb/ac	1,358	1,367	51	0.91
Disappearance, lb DM/AUM ¹	963	523	208	0.28
	Disappearance, % change from initial biomass			
Grasses	36.0	29.3	10.2	0.69
Grass Seedheads	81.0	74.7	3.2	0.29
Forbs and legumes ²	54.7	27.7	15.0	0.33
Sunflower heads	100	100	-	-

¹AUM = Animal Unit Month = 1000-pound animal grazing over a month of time; expected intake would be 702 lb of DM

²mostly sunflower stems

Table 6. Carrying capacity and performance of steers grazing a summer planted 17 way mix continuously (CONT) or strip-grazed (STRIP) over a 54 d period in the fall/winter in eastern NE

Variable	CONT	STRIP	SEM	P-value
Initial BW, lb	635	635	0.7	1.00
Final BW, lb	718	713	5.3	0.55
ADG, lb	1.54	1.45	0.08	0.55
AUM/ac ¹	1.20	1.71	0.13	0.10
Gain, lb/ac	83	109	2.9	0.02
Cost of gain, \$/lb	0.81	0.78	0.03	0.56

¹AUM = Animal Unit Month, a 1000-pound animal grazing for one month

Table 7. Effect of continuously grazing (CONT) vs. strip-grazing (STRIP) stockpiled annual forages in the fall/winter on carrying capacity and forage disappearance over 7 site years

Variable	CONT	STRIP	SEM	P value
Initial biomass, lb/ac	2,288	2,104	605	0.27
Final biomass, lb/ac	940	802	259	0.16
AUM/ac	1.26	1.74	0.26	0.02
Disappearance, lb DM/AUM	1,643	767	544	0.20

¹AUM = Animal Unit Month = 1000-pound animal grazing over a month of time; expected intake would be 702 lb of DM