

Table 1. Experiment treatments and corresponding information.

Location	Treatment ¹	Year	Ha	# Head	Grazing period (days)	Stocking rate (AUM/ha)
Miller	IES	2010	12.61	22	60	2.51
Miller	SL	2010	12.61	11	120	2.51
Volga	IES	2010	8.14	18	60	2.65
Volga	SL	2010	8.14	9	120	2.65
Volga	IES	2011	8.14	20	60	4.28
Volga	SL	2011	8.14	10	120	4.28

¹Treatments: IES = intensive early stocking; SL = season-long continuous control.

Table 2. Regression equations for drop disc height (cm) and biomass (g 0.25 m⁻²) for collection dates at Miller and Volga, SD, for intensive early stocking (IES) and season-long continuous (SL) stocking systems.

Location	Treatment	Collection	Date	Equation ^a	R ²
Miller	IES	1	5/3/2010	y=7.5048x-10.6	0.8208
Miller	SL	1	5/3/2010	y=3.8039x+26.233	0.6767
Volga	IES	1	5/17/2010	y=7.1045x-16.674	0.9355
Volga	SL	1	5/17/2010	y=6.4735x-2.3625	0.8300
Miller	IES	2	6/9/2010	y=2.9025x+15.271	0.6274
Miller	SL	2	6/9/2010	y=1.7672x+41.067	0.9065
Volga	IES	2	6/22/2010	y=4.1261x+3.8164	0.6800
Volga	SL	2	6/22/2010	y=4.3024x+2.4828	0.7211
Miller	IES	3	7/13/2010	y=4.2813x-9.1695	0.7622
Miller	SL	3	7/13/2010	y=4.5164x-5.2953	0.8791
Volga	IES	3	7/23/2010	y=8.2263x-14.92	0.7425
Volga	SL	3	7/23/2010	y=3.1937x+51.402	0.1093
Miller	IES	4	8/13/2010	y=5.4439x+16.479	0.3344
Miller	SL	4	8/13/2010	y=2.2481x+65.112	0.1992
Volga	IES	4	8/23/2010	y=4.1425x+27.791	0.2833
Volga	SL	4	8/23/2010	y=4.3017x+19.177	0.4694
Miller	IES	5	8/31/2010	y=7.9675x-32.766	0.8481
Miller	SL	5	8/31/2010	y=3.2335x+36.379	0.4948
Volga	IES	5	9/22/2010	y=6.9838x-13.268	0.7031
Volga	SL	5	9/22/2010	y=6.3898x-2.7302	0.7410
Volga	IES	1	5/24/2011	y=4.0329x+29.306	0.2673
Volga	SL	1	5/24/2011	y=6.3487x-8.5804	0.7985
Volga	IES	2	6/24/2011	y=4.1122x+31.434	0.4891
Volga	SL	2	6/24/2011	y=4.6505x+27.678	0.4380
Volga	IES	3	7/28/2011	y=5.0534x+9.2647	0.7328
Volga	SL	3	7/28/2011	y=7.8573x-21.865	0.7694
Volga	IES	4	9/1/2011	y=6.5453x-23.398	0.8603
Volga	SL	4	9/1/2011	y=5.5926x-11.396	0.8565
Volga	IES	5	10/4/2011	y=5.3305x+10.003	0.9394
Volga	SL	5	10/4/2011	y=5.6566x+0.7575	0.7472

^a x = height in cm and y = g 0.25 m⁻²

Table 3. Percent CP, ADF and NDF, and standard error (SE), at five different collection periods averaged over site and growing season for intensive early stocking (IES) and season-long continuous (SL) stocking systems.

Collection	CP			ADF			NDF		
	IES	SL	SE	IES	SL	SE	IES	SL	SE
----- % -----									
1	9.98	9.82	0.59	38.85	38.45	0.57	61.08	60.25	0.71
2	6.41	8.35	0.59	43.12	42.83	0.57	65.37	65.11	0.71
3	7.00	6.58	0.59	44.61	43.67	0.57	67.57	66.51	0.71
4	8.47	7.38	0.59	40.75	40.83	0.57	65.13	65.13	0.71
5	6.48	7.08	0.59	41.92	40.80	0.57	65.97	64.49	0.71

Table 4. Early- and late-season average daily gain (ADG), overall average daily gains, gain per hectare (ha), and standard errors for intensive early stocking (IES) and season-long continuous (SL) stocking systems in eastern South Dakota.

Treatment	0-60 day	60-120 day	Overall	Gain/ha
	ADG	ADG	ADG	
----- kg/d -----				
IES	0.56(±0.09) ^a	NA	0.56(±0.07) ^a	70.98(±4.32) ^a
SL	0.61(±0.09) ^a	0.67	0.64(±0.07) ^a	78.76(±4.32) ^a

^a Means followed by different letters within the same column are significantly different ($P < 0.05$)

Table 5. Percent cover of functional groups and standard error (SE) averaged over site and growing season for intensive early stocking (IES) and season-long continuous (SL) stocking systems in eastern South Dakota.

	Treatment		SE	P-Value
	IES	SL		
Native warm-season grasses (%)	1.7 ^a	<0.1 ^b	0.25	0.05
Native cool-season grasses (%)	1.2 ^a	0.3 ^a	0.41	0.25
Introduced cool-season grasses (%)	53.1 ^a	52.6 ^a	4.57	0.94
Native forbs (%)	0.4 ^a	0.6 ^a	0.30	0.61
Introduced forbs (%)	1.2 ^a	1.0 ^a	0.20	0.50
Litter (%)	91.3 ^a	95.9 ^a	1.76	0.21

^{a,b} Means followed by different letters within the same row are significantly different ($P < 0.05$)

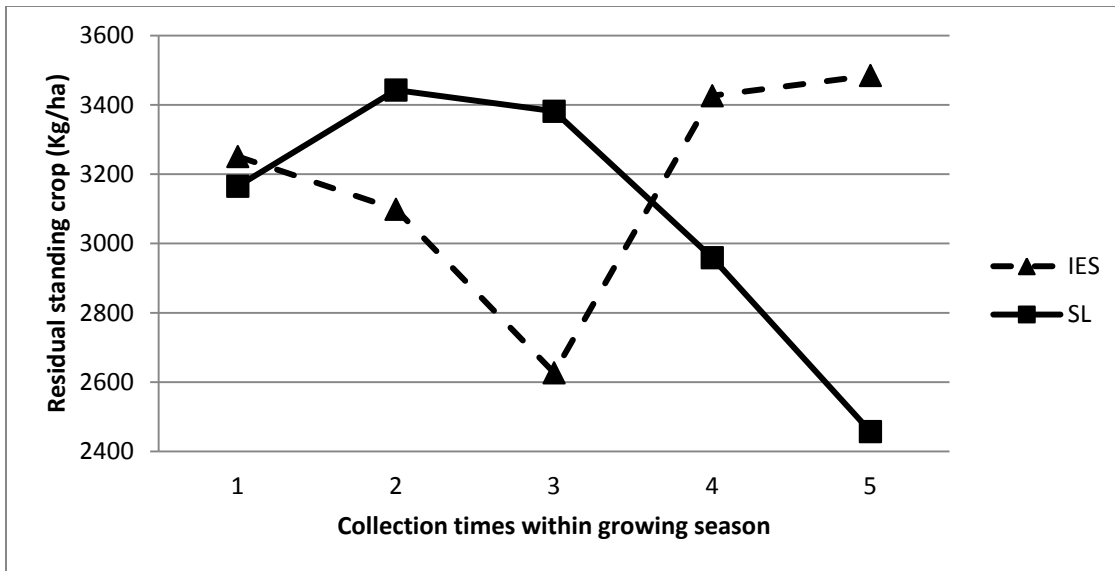


Figure 1. Influence of clipping time on components of residual standing herbage for intensive-early stocking (IES) and season-long continuous (SL) stocking systems. Data are averaged across treatment locations and year.

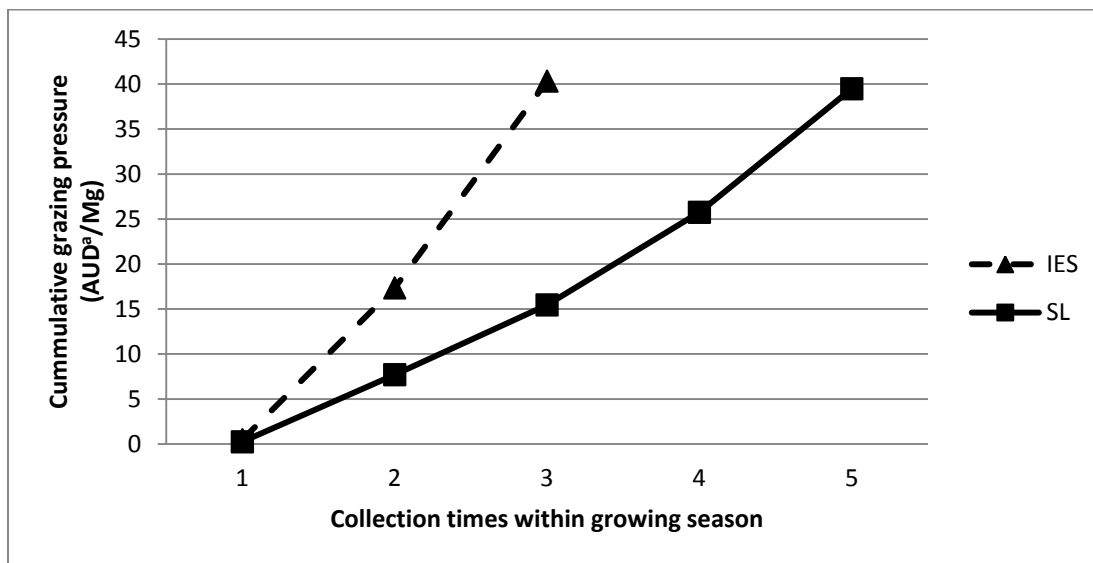


Figure 2. Cumulative grazing pressure for intensive early stocking (IES) and season-long continuous (SL) stocking systems at each standing crop biomass collection time.
^a AUD is animal unit day.