

**Bressner Pasture Grazing Report**  
**5-year Data**  
**Effect of Fall Grazing on Following Summer's Gains**

**Frank Brazle, Dale Lanham, Twig Marston**

**Introduction**

Many Flint Hills stocker operations utilize Intensive Early Stocking management. This management scheme grazes native-grass pastures with stocker cattle during the first months of summer (late April to mid-July) and takes advantage of high quality forage growth. After cattle are removed from pastures, the grass plants are allowed to rest, complete their life cycles, and establish carbohydrate reserves. Oftentimes weather conditions will allow abundant plant regrowth during the last half of the summer. During late summer, the plant matures and its nutritive value declines. Many cattle producers would like to graze this low-quality forage if no harm would be done to the desirable pasture grasses or the next year's cattle performance. Typically, the cattle used to graze this dormant native grass would be calves started in the fall, cows, and/or yearlings. Fall grazing has the potential to reduce the amount and cost associated with feeding mechanically harvested forages. However, concerns about animal performance and range conditions persist. With these facts in mind, the objective of this study was to determine if fall grazing following intensive early stocking would have an effect on the subsequent summer stocker cattle gains.

**Material and Methods**

Eight native grass pastures located near Yates Center, Kansas were randomly allotted to treatments. Treatments consisted of: 1) stocker cattle grazed following the guidelines of a normal Intensive Early Stocking program, or 2) stocker cattle grazed following the same guidelines as Treatment 1 plus pastures were grazed in the fall. The intended outcome of treatment 2 was to have about 800 lb of forage per acre left after fall grazing for spring pasture burning. Therefore, the methods used to determine stocking rate for fall grazing on native grass were as follows:

$\text{Lb of D.M. of available forage/acre} - 800 \text{ lb} = \text{lb of forage} \times .33 = (\text{harvest efficiency}) = \text{lb of forage to be consumed by cattle/acre}$

$\text{Stocking rate} = \text{acres} \times \text{lb of forage consumed} \div 2\% \text{ of body weight of cattle} \times \text{days} = \text{number of cattle/pasture}$

Example: 80 acre pasture with 1,100 lb of available forage per acre to be grazed by 500 lb steers for 60 days (October 1 to December 1).

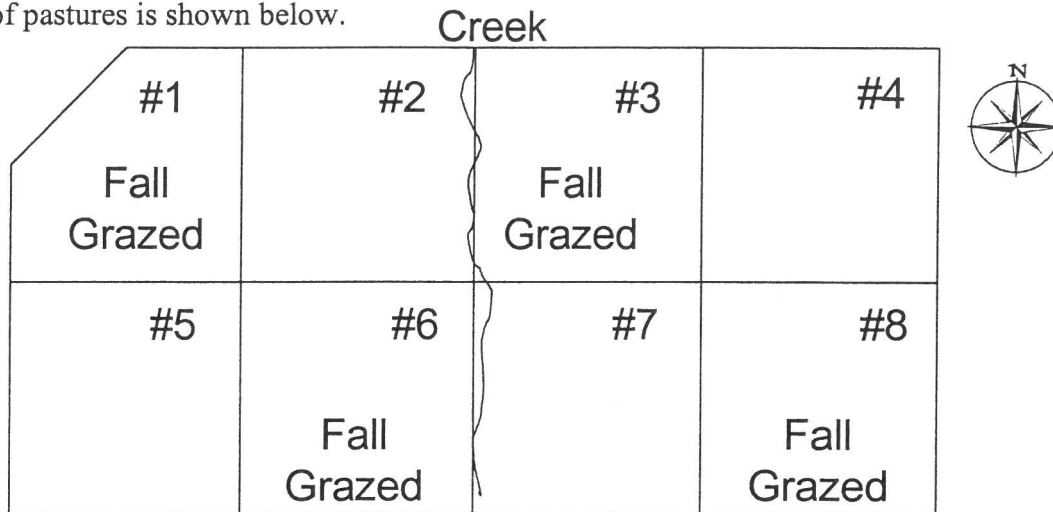
$1,100 \text{ lb} - 800 = 300 \text{ lb} \times .33 = 99 \text{ lb available forage for consumption}$

$\text{Available forage} = 80 \text{ acres} \times 99 \text{ lb} = 7,920 \text{ lb}$

$\text{Predicted animal consumption} = 500 \text{ lb} \times 2\% = 10 \text{ lb} \times 60 \text{ days} = 600 \text{ lb/head}$

$\text{Stocking rate} = 7,920 \div 600 = 13 \text{ head per 80 acres (500 lb steers for 60 days)}$

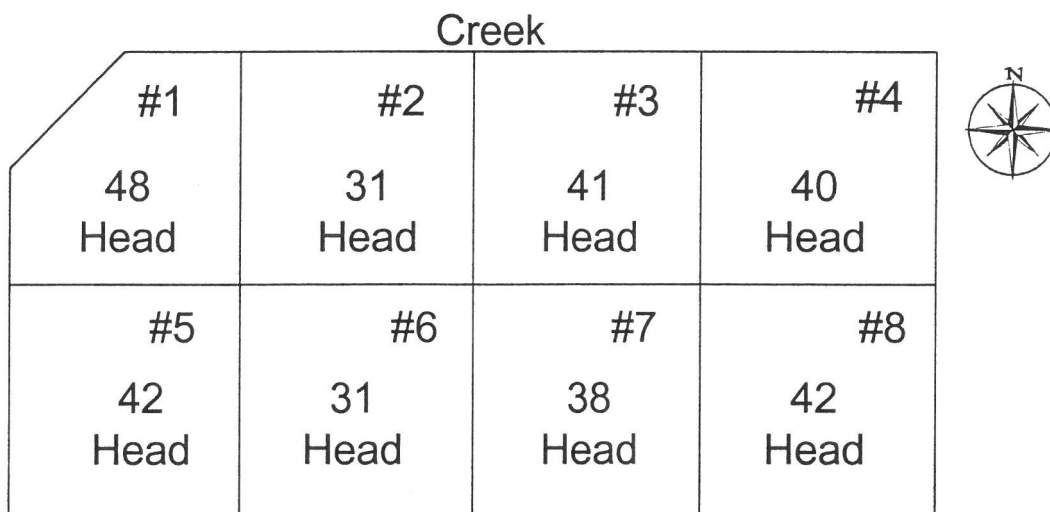
Fall grazing was completed in October and November. Pastures 1, 6, 3, and 8 were fall grazed. A map of pastures is shown below.



The fall grazing periods varied from 44 to 67 days. Fall grazing was accomplished in years 2001, 2002, 2003, and 2004 with 500 to 600 lb steers or heifers. Fall-grazing cattle were supplemented with 5 lb of corn gluten feed/head/day. The following spring, each pasture was stocked by predicting the AUM carrying capacity of the individual pastures.

### Summer Grazing pastures Stocking Rates


The pastures were grazed with 500 to 600 lb steers for the summers of 2001, 2002, 2003, 2004, and 2005. For years 2001 to 2004, the 625 acres (8 pastures) were stocked with 313 hd steers (500 - 600 lb) and grazed from April 22 to July 15 (84 days) — resulting in an average stocking rate of one  
steer per 1.99  
acres.



**Results of 5 Years of Research (spring grazed) Shown by Pasture**

Creek

#1 538 lb 777 lb ADG – 2.96 lb	#2 542 lb 774 lb ADG – 2.86 lb	#3 545 lb 765 lb ADG – 2.70 lb	#4 549 lb 787 lb ADG – 2.90 lb
#5 534 lb 767 lb ADG – 2.87 lb	#6 542 lb 762 lb ADG – 2.71 lb	#7 545 lb 753 lb ADG – 2.55 lb	#8 550 lb 772 lb ADG – 2.72 lb



\*First number represents average starting weight; second number = out weight.

**Results of Intensive Early Stocking**

Table 1. Summer stocker cattle performance

	Starting & Fall Grazing	Summer Grazed Only	P-Value
Starting wt, lb	544	543	
Ending wt, lb	769	770	0.665
ADG, lb	2.77	2.79	0.665

This table clearly shows no difference in the average daily gain of stocker cattle regardless if pastures were fall grazed or rested.

The data collected for the fall grazed cattle (with 5 lb supplemental corn gluten feed/head/day) is shown in Table 2.

Table 2. Summary of the fall grazing periods.

	Year				
	2000	2001	2002	2003	2004
No. of cattle	74	62	74	77	91
No. of grazing days	62	55	67	52	44
In wt, lb	512	541	599	564	534
ADG, lb	1.41	1.44	1.39	1.47	1.36

It appears from these data that cattle producers can take advantage of fall grazing to increase the production of beef per acre of pasture without compromising normal summer animal performance.

## Summary

Native grass can be fall grazed (in October and November) following normal half-season grazed pasture (Intensive Early Stocking) when regrowth occurs without negative impact on the following year's summer animal performance. However, guidelines must be used in determining fall grazing stocking rates to ensure desired amount of grass so that native grass pastures can be burned in the spring.