

TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

BOISE, IDAHO

SOIL CONSERVATION SERVICE

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PROPER USE

The following tables from various locations give summary information showing that "proper use" pays and will provide you with benefit-cost information on this practice. You can refer to this information in your work with ranchers in presenting alternatives for making planning decisions.

Table 1

From Agricultural Research Vol. 4, No. 11, May 1956.
20 years of research at Miles City, Montana.

	Heavy Grazing	Moderate Grazing	Light Grazing
Stocking rate, acres per cow	23	31	39
Calving percents	71%	86%	93%
Pounds calf gain pounds per day	1.6	1.8	1.9
Pounds calf per cow at weaning	268	428	438
Pounds calf per acre	11.6	12.1	10.5

These figures would have much more force if you can get actual information which could be substituted into the above tables from your own locality.

Table 2

Desert Range Experiment Station, Milford, Utah

Results of 3 intensities of grazing use during the winter on forage increase and net gain per ewe.

	Light Grazing	Moderate Grazing	Heavy Grazing
Av. stocking rate, acres per sheep per month	3.6	2.6	1.7
Yield trend increases, percent	239	321	33
Winterfat net trend, percent	231	267	0
Pounds total net gain per ewe, winter period	8.5	11.4	-0.4

Table 3

Herbage yields and usable forage per acre on range grazed moderately in alternate years in comparison to yields on range grazed heavily each year, 1952.

	Moderately Grazed		Heavily Grazed	
	Pounds		Pounds	
	Total Herbage	Usable Forage*	Total Herbage	Usable Forage*
Winterfat	239	96	155	62
Bud Sagebrush	25	10	10	4
Indian Ricegrass	69	41	10	6
Squirreltail	36	18	10	2
Russian Thistle	8	1	131	13
Other	70	7	43	4
Total	447	173	349	89

*These two columns added by Lamar Mason.

Table 4

Herbage yields in pounds per acre on moderately and heavily grazed black sagebrush range.

	Initial Yields	Moderate Grazing			Heavy Grazing		
	1934	1938	1947	1952	1938	1947	1952
Rabbitbrush	66	100	28	20	162	244	86
Winterfat	181	369	279	143	205	153	99
Black Sagebrush	21	45	296	164	14	28	10
Indian Ricegrass	10	15	41	14	11	19	10
Squirreltail	3	4	28	16	1	5	1
Russian Thistle	T	T	6	11	3	97	56
Total	287	545	684	372	401	554	262
Usable Forage	142	284	433	201	161	168	94

Sheep wintered over an 8-year period on moderately grazed and heavily grazed range. Ewes on moderately grazed range wintered 8 pounds better per head, produced about 1 pound more wool, 11% more lambs, and suffered 5% less death loss than those on heavily grazed range. Net income per head \$3.46 on moderate grazed range and \$1.69 on heavy.