



Square Butte

DESCRIPTION, INVENTORY AND ANALYSIS OF ALLOTMENT

Class of stock Cattle Stocking (AUs) 650 (AUMs) 1,545  
 June 1 July 15  
 Season of grazing (Dates) November 1 to November 30  
 Character of topography Semi-rough sagebrush - grassland

Table 1. Area of natural vegetation types and culturally treated areas grazed by livestock and by game

Vegetation types and culturally treated areas <u>1/</u>	Total area of type		Area grazed by livestock		Area grazed by game	
			At present	30 years from now <u>2/</u>	At present	30 years from now <u>2/</u>
(name)	(acres)	(per-cent)	(acres)	(acres)	(acres)	(acres)
1 Grassland	3,360	31.1	3,360	3,300	3,360	3,360
4 Sagebrush	5,277	48.8	5,277	5,237	5,277	5,277
Spraying	1,230	11.4	1,230	1,230	1,230	1,230
14 Greasewood	910	8.4	910	910	910	910
6 Conifer	25	0.3	25	25	25	25
Other						
Allotment Total	10,802	100	10,802	10,762	10,802	10,802

1/ List culturally treated areas under appropriate vegetation types.  
2/ Under improved management.

Table 2. Composition, value, use and development of plant species in natural vegetation type or culturally treated area.

Type or treated area (name) Square Butte RCA System (Total Area)

Species	Amount in cover <sup>2/</sup>	Forage value				Utilization ave.	Start growth (date)	Development Flow-ering (date)	Seed ripe (date)	Regrowth Leaves -twigs (date)	3/ Flower stalks (date)
		Fl	Gd	Fr	Pr						
Grasses & Grass-like	(percent)	Check one)				(Per'nt)	(date)	(date)	(date)	(date)	(date)
Agropyron smithii	20	x				55	4/15	6/15	7/15	5/15	5/1
Agropyron spicatum	5		x			30	5/1	7/15	8/1	6/1	5/15
Stipa comata	10		x			55	4/15	7/1	7/15	5/15	5/1
Bouteloua gracilis	10			x		40	5/1	6/15	8/1	6/1	5/15
Koeleria cristata	5		x			50	4/15	6/1	7/1	5/15	5/1
Stipa viridula	5	x				55	4/15	7/1	7/15	6/1	6/1
Chenopodium cuspidata	5		x			45	5/1	7/1	7/15	6/15	6/1
Poa secunda	5			x		50	4/1	5/15	7/1	5/15	5/1
Cilamovilfa longifolia	T			x		20	5/1	6/15	7/15	6/1	5/15
<b>Total</b>	<b>65</b>										
Forbs											
Melilotus officinalis	1	x				60	4/1	6/15	7/15	6/1	6/1
Phacelia coccinea	2			x		20	4/1	5/1	6/15	6/1	5/1
Psoralea spp.	1			x		15	4/15	5/15	6/15	6/1	5/15
Thermopsis montana	1			x		30	5/1	6/15	7/15	6/1	5/15
Chicoboodii	2				x	5	4/15	5/15	7/1	6/1	5/1
Lomatium macrocarpum	1			x		10	4/1	5/15	6/15	5/15	5/1
Eriogonum sp.	1				x	10	5/1	7/1	8/1	6/1	6/1
Chillea lanulosa	1			x		20	4/15	6/1	7/1	5/15	5/15
<b>Total</b>	<b>10</b>										
Shrubs and trees <sup>1/</sup>											
Artemisia tridentata	10			x		30	4/15	8/15	9/15	7/1	6/15
Artemisia frigida	5				x	10	4/15	8/1	9/1	7/1	6/15
Chrysothamnus viscidiflorus	3			x		20	5/1	7/15	8/15	---	---
Sarcobatus vermiculatus	2				x	10	5/1	---	---	---	---
Rhus trilobata	T		x			50	5/1	---	---	---	---
Chrysothamnus vauseosus	T		x			40	5/1	8/1	9/1	---	---
Yucca spp.	5			x		30	4/15	7/15	8/1	---	---
Symphoricarpos alba	T		x			40	5/1	7/15	9/1	---	---

1/ Including conifers

2/ For trees and shrubs include estimates only for species that can be changed or removed in a range improvement program.

3/ How late in spring can the species be grazed and still produce grazable leaves or seed-producing flower stalks?

Pinus Ponderosa	Overstory	x	0	---	---	---	---	---
Juniperus spp.	Overstory	x	10	---	---	---	---	---
<b>Total</b>			<b>25</b>					
<b>Grand Total</b>			<b>100</b>					

Table 4. Estimated utilization of available forage in natural vegetation types and culturally treated areas and condition of range

Vegetation type or treated area <sup>1/</sup>	Use of total tonnage of forage in type  (percent) AUMS %	Range condition				
		Vigor of forage species  (L,M,H) <sup>2/</sup>	Ratio of good to poor forage species  (per- cent) <sup>3/</sup>	Density of forage  (percent of poten- tial)	Sheet Erosion	
					Depth (Inches)	Extent (Percent of ground area)
1 Grassland	(456) 50	L	Good	80	1	20
4 Sagebrush	(916) 35	M	Poor	60	2 - 3	25
Spraying	( 82) 35	M	Good	95	2 - 3	25
14 Greasewood	( 89) 40	L	Poor	60	3	40
6 Conifer	( 2 ) 15	H	Good	95	1	10
<b>Allotment average*</b>	<b>(1545) 59.7</b>			70	2	25

1/ List treated areas (reseeded, sprayed, etc.) under appropriate vegetation types.  
 2/ L = low, M = moderate, H = high  
 3/ From Table 2 Excellent and good species = good; fair and poor species = poor.

What percent of the livestock forage on the range is used by game? Unknown

What are the principal foraging game animals? Antelope and some Mule Deer.

\* These were computed by actual relationship of the factors to each vegetation type's portion in Aums. or acres.

Table 6. Effect of planned cultural treatments on grazing capacity

Vegetation type to be treated	Area	Capacity at present		Artificial reseeding				Effect of cultural treatment (6) minus (4) AUMs (7)
				Capacity 30 yrs. hence due to:				
				Grazing management		Cultural treatment		
(name)	Acres	Ac/AUM (1)	AUMs (2)	Ac/AUM (3)	AUMs (4)	Ac/AUM (5)	AUMs (6)	AUMs (7)
-----	----	None		----		----		----
<b>Total</b>								

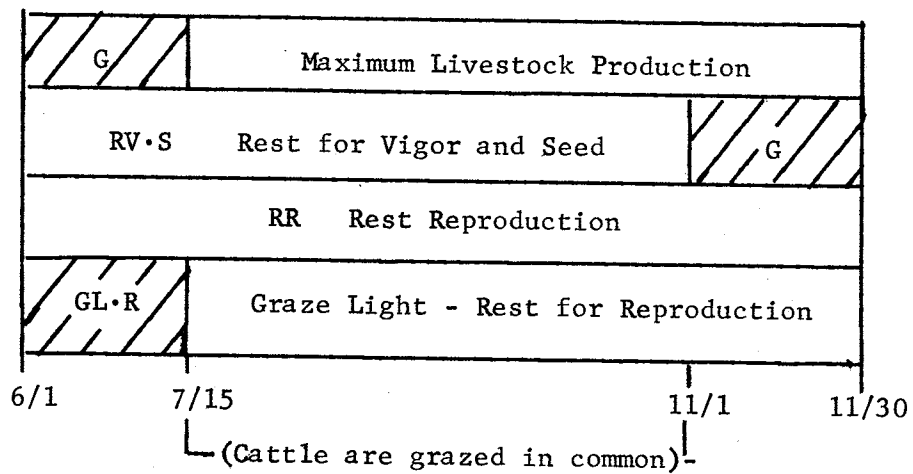
Spraying or other treatment

4 Sagebrush	1,230	8	154	7	176	3	410	256
4 Sagebrush	500	8	63	7	71	3	167	96
<b>Total</b>	<b>1,730</b>		<b>217</b>		<b>247</b>		<b>577</b>	<b>352</b>

## 2. GRAZING SYSTEM'S FORMULA

### Square Butte System

Formula:



Schedule of Treatment:

YEAR	Pasture A 1	Pasture B 2	Pasture C 3	Pasture D 4
1965	RR	G	GL·R	RV·S
1966	GL·R	RV·S	G	RR
1967	G	RR	RV·S	GL·R
1968	RV·S	GL·R	RR	G

Square Butte

Season  
June 1 - Nov 30  
6 months

Treatment

A		462	③	
B			④	627
C			①	
D	650		②	

6 June      7 July      8 Aug      9 Sept      10 Oct      11 Nov

{ June 1 - July 15 }      { Nov 1 - 30 }  
 flowering      seed ripe shrubs

Ave use 40%

① = pasture number

Season Nichols Co. Lee

April 1 - Nov. 30      8 months