ALLOTMENT MANAGEMENT PLAN

BULLDOG C&H ALLOTMENT KETTLE FALLS RANGER DISTRICT COLVILLE NATIONAL FOREST

PREPARED BY	1/31/75 DATE
15/ Out Barrett PERMITTEE REVIEW	DATE DATE DATE
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(with District file copy only)

I. INFORMATION

A. General History

Prior to 1950 this allotment was used by sheep. Cattle use began in 1951 and has continued up to the present. The allotment has always received season long use, the cattle starting in the lower portions, moving upwards and west as the season progresses.

No fencing was ever done other than short drift fences and cattle-guards to define allotment boundaries. Water developments and feed ways were constructed at various times over the years to help with distribution. Road construction in conjunction with timber sales has had a major affect on distribution over the years.

The permittees have been active in moving cattle, salting, and keeping trails open. They are familiar with the allotment.

Allotment analysis was completed in 1968. Since that time there have been various inspection trips documenting that portions of the allotment are abused and a rest or deferrment system is needed.

A three pasture system was proposed during the allotment analysis.

The permittees agreed to construct two interior pasture fence. This program was started in the spring of 1973. The fences are to be complete by the start of the 1976 grazing season.

Melvin Lakin and Art Barrett are the present permittees holding term permits for 100 cattle, 6/1-10/15, and 30 cattle, 6/1-10/15, respectively. They also run 7 and 2 head, respectively, for the same season under temporary permit. This is a total permitted use of 625 AM.

There are no records of utilization studies. Three permanent trend studies were established in 1953, 1954, and 1968. The two early studies may not be locatable. The 1968 study might still be found,

and should be kept up as it is located in a "key" area.

Two paced trend studies were taken in 1968. These should be reread periodically.

The last management plan was written in 1963 and called for season long use.

Ā	Pe		Actual_			A.M.		
Y E A R	Season	Term	Temp	A.M.	Season	No's	A.M.	Unauthorized Use
51	ipp Eth Mair Cts	= n		State Mich	w	<u></u>	E2 #0	no ===
52					hel 660 853 855			
53	M G	None	74		900 E3 604 804			
54		li .	113		MORE SIGNS PROCES SIGNS			Ver 900
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56		II	137	#* **	40 au au au	go 24		ESS 604
57		NON	USE	THIS	YEAR			
58		None	50		MA AA 197 553			UN SPE
59	5/21-9/30* 5/21-10/15**	n	20* 50**	333		100	383	··· ·
60	6/1-9/30* 5/21-10/15**	н	H	327	00 MA 80 SM	100	405	
61	5/21-10/15	II	Ħ	343		70	339	
62	B	Ħ	20* 80**	490		100	476	
63	11	н	30* 100**	637		130	585	
64	н	Ħ	n	II.	5/30-10/15	30* 100**	602	
65	ii	н	11	16	5/21-10/15	11	641	
66	, 11	11	н	11	II	п	641	
67	II	н	11	t1	5/21-11/5	28* 87**	677	
68	Ħ	30* 100**	None	11	5/21-10/15	30* 100**	628	
69	41	11	и	Ħ	н	11	11	

B. PERMITTED AND ACTUAL USE (Cont'd)

Y E	<u> Permitted</u>					Actual		A.M.
А <u>R</u>	Season	Term	Temp	A.M.	Season	No's	A.M.	Unauthorized Use
70	6/1-10/15	30* 100**	2* 7**	628	5/30-10/28	27* 70**	427	2*
71	н	11	11	н	5/30-12/7	32* 105**	648	12*
72		H	н	. #	6/1-10/18	32* 117**	546	12
73	11	н	H	n	6/1-10/1	32* 107*	570	
74 75	·	11 30* 70**	22*	11 549	5/29-10/31 5/25-16/15	32 ** 107 * * 62 * 70 * *	634 556	Various on ACE duties Colores 0/29 10/181

^{* =} Art Barrett

^{** =} Mel Lakin -- = No Record

C. EXISTING IMPROVEMENTS

Name	Туре	Description	Location	Yr. Const.	Mtce Respon.
Milk	R.W.D.	Wood Trough	SW4, Sec 30,T38N,R36E	Unknown	Permittee
Wrench	R.W.D.	Wood Trough	NW4, Sec 32,T38N,R36E	FY 1970	Permittee
Aspen	R.W.D.	Wood Trough	NW4, Sec 15,T38N,R35E	Unknown	Permittee
Oxerine	R.W.D.	Wood Trough	NW4, Sec 14,T38N,R35E	FY 1970	Permittee
Elk	R.W.D.	Wood Trough	NE4, Sec 15, T38N,R35E	FY 1970	Permittee
Indian	R.W.D.	Wood Trough	SE4, Sec 9,T38N,R35E	Unknown	Permittee
S. Boulder	Fence	Allotment Boundary fence-wood post & wire-l½ miles	See Allotment Map	FY 1970	Permittee
Midget	Fence	1/10 Mile ald Poly	See Allotment Map	FY 1975	Permittee
Lower Bulldog Glada くり	Fence	Pasture Fence-steel post-3wire-l½ miles	See Allotment Map	FY 1975	Permittee
Trio	Fence	Steel Post-3 wire 1/2 mile	See Allotment Map	とみつく Pending	Permittee
Midget	Cattle- guard	14 ft. metal	SW4, Sec 29,T38N,R36E	Unknown	Forest Service
S. Boulder	Cattle- guard	14 ft. metal	NE4, Sec 10, T38N,R36E	FY 1970	Forest Service
Trio	Cattle- guard	14 ft. metal	NE4, Sec 14, T38N,R35E	Pending	Forest Service
ICY	Ruso was	Motal trough	52, SEC 15, 738N, R39E	crivic	หมาย makhku
	Fig. 18 to the Kin	Stool past - Sunra	ree all maps	CARAGO	3. C. M.S. & 0
	cottle gun, b	Ía ^y jah	Sec. 36 739 835		

D. CONDITION & TREND (See Allotment Analysis Map in reference section)

The 1968 Allotment Analysis gives the following information:

Condition Class of Primary Range

Open to Grazing in %

ondition		Vegetation Type				
Class	l 'Grassland '	2 Meadow	6 Conifer	ŤOTAL		
Good	3	423 feet even	71	74		
Fair	11	1	13	25		
Poor	1	422 KM EP	a m a s	1		
TOTAL	15	1	84	100		

Trend Class of Primary Range

Open to Grazing in %

Condition	Vegetation			Soils				
Class	Up	Down	Static	TOTAL	Up	Down	Static	TOTAL
Good	50	1 9	5	74	61	16	7	84
Fair		15	10	25		13	3	16
Poor		1		Ţ				
TOTAL	50	35	15	100	61	29	10	100

Secondary Range - 14,107 acres (condition and trend not determined)

VEGETATION TYPE BY PASTURE

(Acres-1968 Analysis)

LOWER PASTURE

Primary Timber -195 Acres

Primary Grass 20 Acres

Primary Meadow 25 Acres

TOTAL PRIMARY 240 Acres

Secondary Timber - 4610 Acres

Secondary Grass 338

TOTAL SECONDARY 4948

MIDDLE PASTURE

Primary Timber 905

Primary Grass 363

TOTAL PRIMARY 1268

Secondary Timber -6010

Secondary Grass -73

TOTAL SECONDARY -6083

UPPER PASTURE

938 Primary Timber

Primary Grass 138

TOTAL PRIMARY 1076

Secondary Timber -2638

438 Secondary Grass

TOTAL SECONDARY -3076

E. GRAZING CAPACITY ESTIMATES

The 1963 management plan estimates grazing capacity at 1067 AM all on government ownership. This figure came from a grazing survey made in the 1940's.

Allotment inspection notes since then do not give any grazing capacity estimates.

There is a total of 2584 acres of primary grazing land on the allotment, according to the 1968 allotment analysis. An allowance of 300-400#/acre dry weight palatable forage, 900# dry weight per month consumption, and a 65% utilization level would give a use range of 560-742 AUMs.

The present permit is for 625 AM and should be generally within the allotment capacity, utilization and capacity studies being lacking, and capacity estimates being very rough.

It is worthy to note there are about 14, 107 acres of secondary range on the allotment according to the 1968 allotment analysis. Use is made of some of this area. Assuring a conservative estimate, there should be 509 AMs available to be developed, figured as below:

- 1. 14,107 acres secondary range identified in allotment analysis
- 2. 7,053 acres of #1, which could be used if developed (50% estimate)
- 3. 705,300 lbs. air dry forage from #2 (100 lbs./acre palatable)
- 4. 458,445 lbs. air dry forage from #3 (65% utilization)
- 5. 509 AM from #4 (900#/mo./cow and calf)

For the purposes of this plan, total allotment capacity is assumed to be somewhere between 560 AUM - 742 AUM on primary range and an additional 509 AUMs on secondary range which could become available with proper development. This is a rough estimate, needing much refining.

Estimated capacity on primary grazing land per pasture is as follows:

- 1. 240 acres primary land
- 2. Estimated production: 300-400 lbs per acre air dry desirable forage
- 3. Allowance: 65% utilization, and 900 lbs consumption/AM
- 4. Capacity estimate: 52 to 69 AUMs

In 1974, this unit received about 50 AUM's use. Inspection rides (6/13/74) didn't note any areas excessively used. Development of use on slopes in east half section 16, T38N, R36E, should increase the capacity considerably. 70 AUMs would probably work as presently developed.

MIDDLE PASTURE

- 1268 acres primary land
- 2. Estimated production: 300-400 lbs per acre air dry desirable forage
- 3. Allowance: 65% utilization and 900 lbs consumption/AM
- 4. Capacity estimate: 275-366 AUMS Inspection rides (9/26/74) indicate the 1268 acres primary range is fairly accurate. This would all be north of the South Boulder road. Capacity estimate of 275-366 AUMs seems fair.

UPPER PASTURE

- 1076 acres primary land
- 2. Estimate production: 300-400 lbs per acre air dry desirable forage
- 3. Allowance: 65% utilization and 900 lbs consumption/AM
- Capacity estimate: 233-311 AUMs.

F. SOCIAL AND ECONOMIC CONSIDERATIONS

Both permittees are legitimate ranchers in the sense a major part of their livelihood is derived from ranching and most of their time is spent in ranch operation. Both spend a respectable amount of time working cattle on the allotment.

Positive, or adverse, actions would have a direct effect on the permittees.

G. SPECIAL PROBLEMS AND CONDITIONS

1. Overuse of certain areas

There is considerable correspondence about overuse in logged-over areas along the roads and in clear cuts in Sections 26, 25, T38N,R35E and Section 30, T38N,R36E. These are highly favored areas suffering in condition and trend from yearly heavy utilization.

Large amounts of secondary range

As can be seen, the majority of the allotment is secondary range needing water development and access to be utilized.

Distribution

As with most of the grazing allotments on the District, distribution by herding is very difficult. Fencing is the most positive means of control

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II. MANAGEMENT GOALS

A. RESOURCE GOALS

- Reach or maintain good or better condition class for soils and vegetation by improving areas in less than good condition and reversing downward trends.
- 2. Provide necessary protection from grazing for new timber sales necessary for stand establishment.

B. OUTPUT GOALS

Provide maximum permitted AUMs while meeting other resource needs in a manner as best fits the home ranch operation of the permittees.

III. ANALYSIS SECTION

A. Site and Use Requirements and Limitations

1. Plants

Desirable forage plants must be able to reproduce and maintain themselves to avoid deterioration of grazing values. Other vegetation not significant to grazing values must have the same requirements met. Plant maintenance is disrupted by continued heavy utilization without rest, and through physical destruction by trampling and uprooting.

Where plants need seed production to regenerate, the plant must be allowed to produce and disseminate seed and new plants afforded protection until established enough to be able to withstand grazing pressures.

2. Soils

Generally the soils are sandy and subject to movement by trampling.

Under grazing, the best way to offest movement would be through

establishment of a litter cover.

Soil movement on steeper slopes can be a problem even under optimum plant and litter cover. There may be slopes not capable of withstanding grazing pressure regardless of vegetative conditions.

Soil fertility and condition due to inadequate return of organic matter will be a problem where vegetation is continuously removed.

B. Relationship to Associated Lands

The allotment is well separated from adjoining allotments by topographic barriers. There is presently no need or real opportunity for modification or combination with other allotments or private lands.

C. Management and Development Opportunities

Range administration on the District is not intensive enough to obtain the best grazing system for every allotment in a short time.

In lieu of this, the simplest system that can be implemented quickly, given the limited amount of field data, seems appropriate.

What is proposed is a simple three pasture system providing some deferrment of the pastures. As more data and observation is accumulated, a more sophisticated system can be developed.

The proposed system has the endorsement of the permittee, is relatively inexpensive, time and money wise, and should meet resource requirements to an acceptable degree.

D. Potential Grazing Capacity

There may be an opportunity for more capacity than is presently

permitted, <u>but only</u> under a system that assures resource protection. It should first be shown that areas presently in unsatisfactory condition are improving.

One criteria of improving conditions should be the establishment of new, desirable plants on areas presently in unsatisfactory vegetative condition. Periodic protection of soil by litter accumulation should not be the sole indication of improving range conditions.

Where vegetation is artificial, improvement should be maintained before additional resulting capacity is allocated.

Given improvement in existing condition, development of secondary range to usable range $\underline{\text{may}}$ allow increased capacity to a potential of somewhere around 1069-1250 AUMs.

E. Relationship with other uses and Activities

Recreation

There are no concentrated recreation developments on the allotment. Present recreation consists of hunting game birds and big game, trail riding, and recreation viewing. Hunter and undeveloped camps are throughout the allotment.

South Boulder Creek is a fish supporting stream and receives some fishing pressure.

An improvement in soil and vegetative conditions should enhance present recreation activities. No activities have been identified which would call for total exclusion of livestock.

2. Timber

Timber sales are planned within the allotment at various degrees of completion.

A considerable amount of coordination will be needed between allotment management and these sales. The sales will change

distribution patterns significantly. Use will be made in areas south of South Boulder Creek that haven't received use to date. Additional cattleguards and fences will be required. Natural boundaries will probably be broken.

Reproduction needs will have to be coordinated with grazing plans.

3. Wildlife

There is no big game winter range in the allotment and no identified conflicts between grazing and wildlife values. Enhancement of soil or vegetative conditions would be to the advantage of wildlife.

4. Watershed and Soils

There are areas where livestock concentrations have had a detrimental affect on soil conditions through removal of vegetative cover and trampling. Specifically, newly logged areas probably haven't recovered as rapidly as they would have if they were not grazed. It is anticipated a pasture system will give the livestock control needed to hasten recovery of these areas. This could be done through various combinations of rest, late use, and artificial seeding.

IV. ACTION SECTION

A. Selected Management Prescription

The following grazing system will be put in effect with the 1976 grazing season, pending completion of the pasture fences:

	YEAR	UPPER (233 - 311 AUM)	MIDDLE (275 - 366 AUM)	LOWER (70 AUM)	
1981	1976	139 Head,9/1-10/15 209 AUM	139 Head,6/15-9/1 348 AUM	139 Head,6/1-6/15 70 AUM	
1981	1977	REPEAT SAM	1E SCHEDULE		
	1978	104 Head,8/15-10/15 208 AUM	139 Head,6/1-8/15 348 AUM	35 Head,8/15-10/15 70 AUM	
	1979	REPEAT SAM	1E SCHEDULE		
	1980	139 Head,6/15-8/15 278 AUM	139 Head,8/15-10/15 278 AUM	139 Head,6/1-6/15 70 AUM	
	1981.	REPEAT SAN	TE-SCHEDULE		

This system is designed to afford maximum protection of plant vigor, seedling establishment and survival, and litter cover under the existing stocking level and grazing season.

Stock movements will be forced, the goal being complete stock removal from each pasture when indicated.

This schedule may be modified as pasture capacity and range readiness is firmed up after one complete six-year grazing cycle. Adjustments may be made at any time if capacity estimates or range readiness dates prove too optimistic.

B. Range Improvements

This plan doesn't require any additional improvements. Throughout the first six-year cycle, water developments and fences deemed necessary will be constructed.

C. Review of Alternatives

The only major modification of this plan considered, was turning all cattle in the upper pasture initially during the fifth and sixth year of the cycle.

There is a question of range readiness here. It is doubtful if this unit is ready on 6/1. 6/15 is a trial only, and 7/1 might prove to be a more accurate date.

Two years deferrment, back to back, for each unit, was felt necessary for seedling establishment and survival.

Forced stock movements, as opposed to opening gates and letting the stock drift naturally, was felt necessary because of the allotment's topography, and the tendency for the stock to "keg up" and not drift to new areas on their own.

VI. REFERENCE SECTION

- A. Range Allotment Map
- B. Range Allotment Analysis Maps (with District file copy only)

V. FOLLOW-UP

A. Examination and Studies

Two key study areas should be located in each pasture by CY 1976. These should be inspected annually, with utilization and trend studies permanently located in them.

Possible key area locations are shown on the allotment map.

Range readiness examinations should be made each spring in all units.