

Range Management Case History No. 3 ^{1/}

Subject: Noncontinuous grazing.

Allotment: Cottonwood Creek

Location: On the Lima Ranger District of the Beaverhead National Forest, 20 miles southwest of Lima, Montana.

Vegetative Types:

- (1) Idaho fescue - Bluestem wheatgrass - Poa (sprayed areas)
- (2) Big Sagebrush - Idaho Fescue (unsprayed areas)
- (3) Willow - Carex - Poa (creek bottoms)

Pasture System: Four Pastures

Pastures A, B, and C have roughly equal carrying capacity (658, 870, and 581 acres primary range respectively). Pasture D is roughly double in size (1232 acres primary). Both the vegetation and soil on all areas rate good with upward or no apparent trends.

All four pastures have been managed under noncontinuous grazing (Rest-Rotation) starting in 1963. Schedule of use follows:

Schedule of Use

	July	August	September	Rest
1963	B	C	D	A
1964	C	D	A	B
1965	D	A	B	C
1966	A	B	C	D

This schedule of use allows two months of "non-use" before a year-long rest and two months of "non-use" (or deferment) after rest. This appears to aid seedling establishment, as is evident on-the-ground.

1/ Based on Actual Range Management Experience.
Beaverhead National Forest - Montana.

2/ By R. J. Pogue, Range Conservationist. Prepared as reference material for Range Management Training on September 12-13, 1966

History, Schedule of Use and Increased Capacity:

Approximately 1700 acres of sagebrush in pastures A, B, C & D were sprayed in June 1961 to control sagebrush. Three gallons of diesel oil containing two pounds of 2, 4-D acid was used per acre. Three strips, five chains in width and over a mile long were left unsprayed for study. The entire allotment was rested in 1961 and 1962. The following schedule shows "use" since 1960:

Schedule of Use and Increased Capacity

		Increase in Numbers	Regular Season	Increase in cow months due to extension of season
1960	100 C	0%	7/1 to 9/30	0%
1961	Allotment rested for entire year			--
1962	Allotment rested for entire year			--
1963	100 C	0%	7/1 to 9/30	0%
1964	175 C	75%	7/1 to 9/30	17%
1965	200 C	100%	7/1 to 9/30	17%
1966 ^{3/}	200 C	100%	7/1 to 9/30	?

The pasture system required the construction of 7½ miles of drift and division fences.

^{3/} 1966 is a drought year, but feed is adequate. Rest-Rotation Management appears to minimize the effects of drought.

Some excerpts from 1966 inspection notes reads:

"July 6 and 7 - Checked range while reading point centered quadrat method. Pastures A and B inspected. Grass conditions good in spite of dry spring".

"August 30 - Took clippings in Pastures A, B, and D. Lots of dry feed left in both pastures used. Estimate utilization throughout will not exceed 25%".

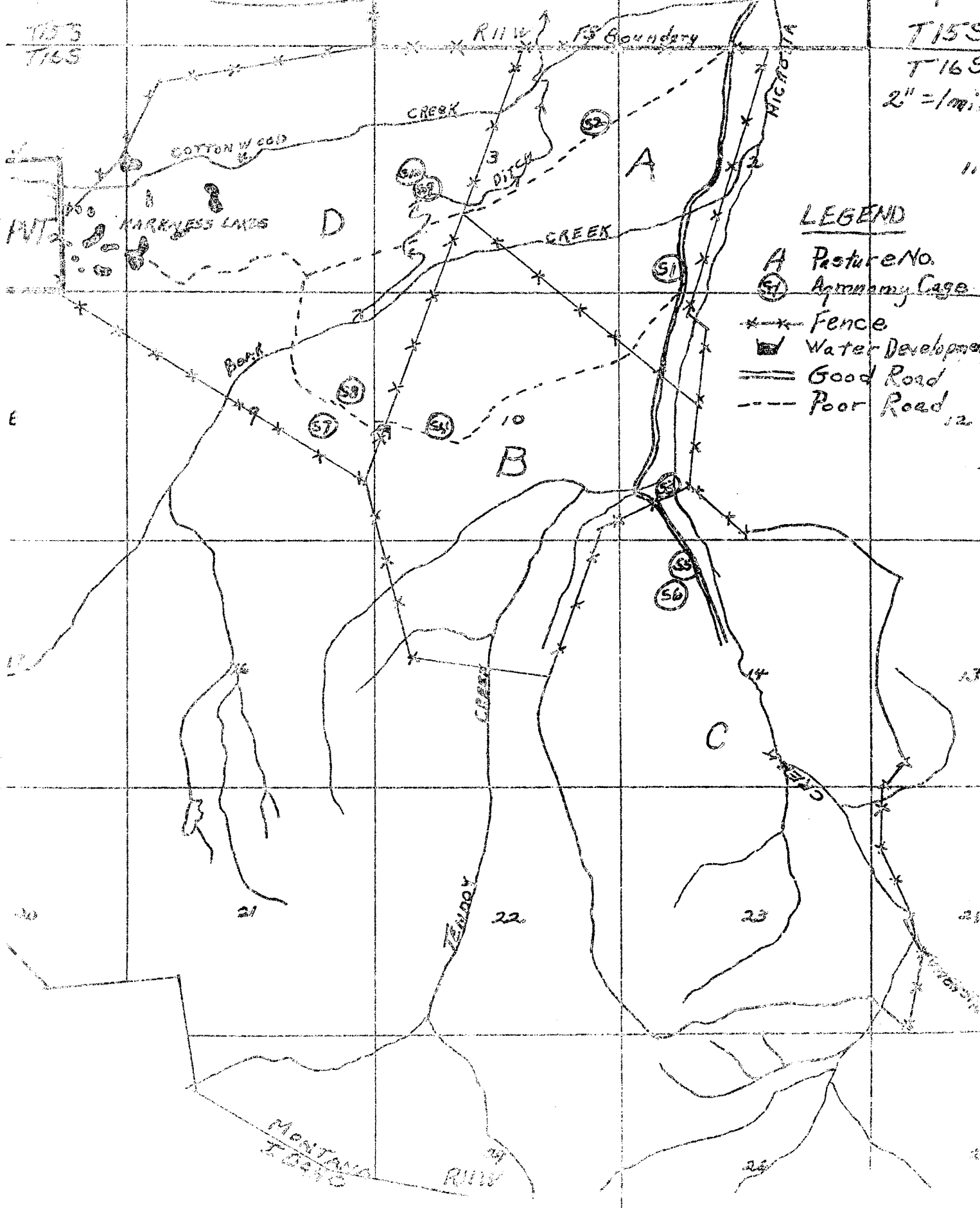
Results to Date:

1. Permitted numbers have doubled.
2. Extension of season by fifteen days is not uncommon even with double the original number of stock.
3. Utilization has never reached 50% on any key area sampled in any pasture.
4. Range conditions are good with stable or upward trends on both vegetation and soil.
5. The full potential of this allotment has not been determined yet. Additional increases in numbers, season, or both is almost certain to come.
6. The year 1966 in Beaverhead County has been one of the driest on record. Rest-rotation grazing minimizes the effect of drought. Compare these production figures taken from clippings of agronomy cages.

Production (#/ac.) for 1966 (dry year) and 1964, 1965 (wet years)

<u>Pasture</u>	<u>Cage #</u>	<u>1966</u>	<u>1964</u>	<u>1965</u>
A	1 (S)	960	1580	-
A	2 (U)	660	380	920
B	3 (U)	1200	950	-
B	4 (S)	1700	1910	-
C	5 (S)	-	1920	-
C	6 (S)	-	2080	-
D	7 (U)	1080	1360	780
D	8 (U)	1140	1540	1180
D	9 (S)	840	1620	360
D	10 (U)	760	900	840

CUSTOMWOOD CO. ALBUQU.



LEGEND

- A Pasture No.
- (51) Agency Cage
- *-* Fence
- Water Development
- Good Road
- Poor Road