

Clark Mtn

Amendment #1
to the
Allotment Management Plan
for
Clark Mountain Cattle Allotment

Powell Ranger District
Dixie National Forest
Region Four

This document amends the Allotment Management plan for the Clark Mountain Cattle Allotment approved on 1/16/78 as follows:

III B. Grazing Schedule

The following rotation will be used during treatment of various locations on the allotment.

<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
Barney Cove/Clark Bench #1	6/1-8/10	6/1-8/10	Rest
Sand Wash #2	Rest	8/11-9/20	6/1-8/10
Blind Spr/Seeps Pond #3	8/11-8/30	Rest	9/1-9/20
Blind Spring #4	9/1-9/20	Rest	8/11-8/30
Right Fork Sanford #5	9/21-10/10	9/21-10/10	9/21-10/10

The proposed treatment areas in the Sand Wash and Right Fork Sanford Units would be burned in the fall of Year 1 after one years rest. The proposed treatment areas in the Barney Cove/Clark Bench unit would be treated in the fall of year 2 after one seasons rest. The treatment areas in the Blind Spring Units would be burned in the fall of Year 2 after one seasons rest.

The following rotation will be followed during non-treatment years:

<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>
Barney Cove/Clark Mtn #1	Rest	6/1-8/10
Sand Wash #2	6/1-8/10	Rest
Blind Spring/Seeps Pond #3	9/1-9/20	8/11-8/30
Blind Spring #4	8/11-8/30	9/1-9/20
Right Fork Sanford #5	9/21-10/10	9/21-10/10

This rotation cycle will repeat

Treatment

Rest: No cattle grazing season long. The rested unit may be used late on a drought year as authorized by a Forest Officer.

Graze at range readiness: 6/1-8/10 (or until proper use is reached).

The System allows each spring-summer unit a minimum of one complete years rest every other year. It allows each later summer and fall units a deferment until seed ripe every year.

This rotation allows for the plant needs but also facilitates livestock herding and minimizes trailing.

Prepared by: John Bell Date: 3-7-88

Accepted by: x Gregory D. Coxell Date: x 3/14/88

Reviewed by: A. Alan Bacausia Date: 3/23/88

_____ Date: _____

Approved by: Robert H. Meinert Date: 3/25/88
FOR Forest Supervisor

ALLOTMENT MANAGEMENT PLAN

CLARK MOUNTAIN CATTLE ALLOTMENT

Powell Ranger District

Dixie National Forest

Region Four

Original Plan was written by Bruce B. Hronek on December 6, 1967. Plan was approved by Jack Shumate on December 13, 1967.

Plan Updated By: Robert S. Handman Date 1-11-78
Range Conservationist

Recommend Approval Walter A. Peterson Date 1/12/78
District Forest Ranger

Recommend Approval Frank Jensen Date 1/16/78
Chief, Branch of Range Management

Plan Approved By: Wesley J. Bishop Date 1/16/78
Forest Supervisor

I. INFORMATION SECTION

A. Description

The Clark Mountain Cattle Allotment is located approximately six miles east of Panguitch, Utah. It includes portions of Limekiln Creek, Sand Wash Creek and the Right Fork Sanford Creek drainages. All these drainages are tributaries to the Sevier River which is located approximately 5 miles west of the allotment.

Elevation varies from 7200 to 9500 feet. Annual precipitation averages from 14 to 21 inches.

The Clark Mountain Cattle Allotment contains 30,941 acres all of which is National Forest land. The Allotment is surrounded by BLM, private and other National Forest land.

At present, two permittees, Archie Alexander and James Peterson are permitted to graze 93 head of cattle from 6/1-10/10 for 403 animal months.

B. Land Types

The Allotment consists mainly of 6 land types with their associated vegetation and soils. These are: (1) Small mesas and steep sideslopes, consisting mainly of limestone, sandstones, and shales. Dominate vegetation is ponderosa pine, manzanita, black sage, mountain mahogany, bitterbrush, scattered pinyon and juniper, squirreltail and mutton bluegrass. Main soils are gravelly loam and cobbly sandy loam and under lying bedrock material consists of fractured limestone and sandy limestone. (2) Steep, highly dissected slopes with numerous rock outcrops. Main vegetative species include ponderosa pine, manzanita, bitterbrush, bristlecone pine, limber pine, and several native grasses and forbs. These areas are not used by livestock. Primary soils are very gravelly silt loams and gravelly sandy loams. (3) Volcanic rock outcrops. Vegetation is usually barren but some pinyon, juniper and ponderosa pine is present. Only a few scattered pockets of medium textured soils are present. (4) Dissected gravelly alluvial fans. Vegetation includes pinyon and juniper, bitterbrush, mountain mahogany, rabbitbrush, blue grama, Indian rice grass, and needlegrass. Soils consist of gravelly loam and gravelly clay and sandy loam. (5) Pediment sideslopes: Big Sagebrush, rabbitbrush, slender wheatgrass, Indian rice grass, cactus and some pinyon and juniper make up the main vegetative species. Soils consist of loams, gravelly loams and very gravelly sandy clay loams. (6) Rolling to steep hillsides: Dominate species include pinyon and juniper, mountain mahogany, rabbitbrush, blue grama, bluebench wheatgrass and some big sagebrush. Soil textural class is very gravelly loam to gravelly clay loam.

C. Past Use

In 1920 Sanford Canyon and Clark Mountain allotments were combined to form the Clark Mountain Cattle Allotment.

During the early 1900's the allotments were badly overgrazed. Both sheep and cattle were permitted at that time. In 1955 much of the allotment was

reseeded and three years non-use was taken. Cattle were returned to the allotment in 1958. Grazing use has been heavy on areas where water is available.

Livestock numbers and seasons of use remained essentially the same from 1965 through 1975. In 1976 the grazing season was changed from 6/1-9/30 to 6/1-10/10 after five years of studies indicated this change could be made.

The following table shows use on the allotment since it was reseeded:

<u>Year</u>	<u>Number Cattle Grazed</u>	<u>Animal Months</u>	<u>Season</u>
1955	Non-Use		
1956	Non-Use		
1957	Non-Use		
1958	168	547	6/10-9/30
1959	72	191	6/1 -8/10
1960	83	225	6/3 -8/20
1961	65	293	6/1 -10/15
1962	94	373	6/1 -9/30
1963	75	298	6/1 -9/30
1964	85	300	6/1 -9/15
1965	77	282	6/1 -9/15
1966	93	314	6/1 -9/15
1967	92	352	6/1 -9/25
1968	93	341	6/1 -9/21
1969	93	324	6/1 -10/1
1970	92	369	6/5 -9/30
1971	93	369	6/1 -9/30
1972	91	383	6/1 -10/5
1973	93	372	6/1 -9/30
1974	93	372	6/1 -9/30
1975	93	403	6/1 -10/10
1976	93	403	6/1 -10/10

D. Past and Present Management

Proper range management up until 1958 was lacking. Stock consistently congregated around water and denuded those areas. Areas away from water received little use. Concentration areas, primarily Sanford Creek bottom, Seed Lake and Blind Spring received heavy use.

Prior to 1958 there was no rest or deferment on the allotment as such. Cattle grazed the same areas the same time every year.

After reseeding was completed, adjustments were made and pasture fences constructed. This did much to improve management on the allotment.

In 1964 a four-pasture deferred rotation system was initiated. This system worked quite well, but some improvement was needed so the system was changed to a "rest-rotation". It was not a true rest system. Livestock had to move into the "rest" pasture because of lack of water. This problem was recognized in 1967 so a three pasture system was suggested. The three pasture system was used for the first time in 1973. The three pasture system has been used since 1973. However additional modifications will be made.

E. Ranch Operations and Permittees

James Peterson and Archie Alexander are actively engaged in cow-calf operations. They are dependent upon National Forest land to round out their year long operation. A combination of BLM permits, private pastures, and commensurate ranch property are used during the time cattle are off the forest. Their permits on the Clark Mountain Allotment are as follows:

<u>Permittee</u>	<u>No. Of Cattle</u>	<u>Season</u>	<u>A.U.M.'s</u>
James A. Peterson	68	6/1-10/15	295
Archie Alexander	<u>25</u>	6/1-10/15	<u>108</u>
	93		403

F. Range Condition and Trend

The range allotment analysis and mapping was completed in 1962. Approximately 1870 acres of the suitable range had been reseeded. An additional 196 acres was chained in Limekiln in 1966.

Prior to the reseeding, range condition and trend were down on the entire allotment. Observations indicate that trend is not improving around water sources. However, for the rest of the allotment the trend is static or upward.

The following table shows a summary of acreages and various condition classes on the allotment:

<u>Condition Class</u>	<u>Suitable Range (Acres)</u>	<u>Unsuitable Range (Acres)</u>	<u>Total</u>
Good	375		375
Fair	1498		1498
Poor	1217		1217
Not Classified		27,851	
	3090	27,851	30,941

G. Estimated Grazing Capacity

When the allotment analysis was completed there were several areas on the allotment that were classified as unsuitable (used). Observations indicate they could have been classed as secondary range. All they lack is dependable water. The lack of dependable water presents the biggest problem in managing the allotment. Forage and water production varies greatly from year to year, i.e., depending primarily on the amount and timing of precipitation received.

Records and observations indicate that the presently permitted 93 head of cattle can have a full forage supply for the 403 permitted A.U.M.'s on normal precipitation years. On drought years, such as the summers of 1976 and 1977, it becomes necessary to graze all pastures due to the lack of water. Therefore, the allotment is considered properly stocked on normal precipitation years. On extremely dry years the cattle may have to be removed from the allotment before the end of the grazing season. This is due mainly to the lack of water and not forage.

II. MANAGEMENT GOALS

The management goals for the allotment are:

1. Improve forage and watershed conditions on the range that is still in poor condition. Most of the effort in improving forage and watershed conditions on these areas will be through better grazing procedures, upgrading of existing structural range improvements (mainly water development) and the permittees efforts in riding and salting.
2. Provide additional water, where possible, in areas of the allotment that currently have little or no stock water available.
3. Provide for wildlife water needs also.
4. Upgrade existing unit and boundary fences, construct 2 miles of unit boundary fence, and install 3 cattleguards along the Sanford-Berry Springs road to prevent livestock drifting from unit to unit.
5. Work with the permittees to attain proper livestock distribution through proper salting, herding and maintenance of range improvements.
6. Maintain a permanent trend study on a key area within each unit of the allotment.
7. Provide for adequate forage and cover for the deer and elk that inhabit the allotment. Antelope may utilize portions of the allotment in future years.
8. Encourage permittees to drive cattle on to the allotment through Casto Canyon at least every other year so they can drift from south to north through the first pasture.
9. Maintain main roads through the allotment for easier access.

III. ACTION SECTION

A. The management system selected to accomplish the goals for the allotment includes dividing the allotment into five units. Two are spring - summer units and three are late summer - fall units. A rest-rotation system of grazing will be implemented on the two spring - summer units. A deferred rotation system of grazing will be implemented on the 3 late summer - fall units (refer to the allotment map).

1. The improvements needed to implement this system are:

- a. 2 miles of fence
- b. 5 cattleguards
- c. Reconstruct and upgrade 4 water developments and 3 ponds.

2. Benefits:

- a. With the rest-rotation grazing system range and watershed conditions will improve around existing water developments.
- b. More uniform utilization of the range will occur.

3. Drawbacks:

There will be more maintenance responsibilities for permittees.

B. Grazing Schedule

Following is the planned sequence and approximate season of use:

Year	Spring-Summer Units		Late Summer-Fall Units		
	Barney Cove Clark Bench #1	Sand Wash #2	Blind Spring Seeps Pond #3	Blind Spring #4	Blind Spring Right Fk. Sanford
1	Rest	6/1 - 8/10	8/11 - 8/30	9/1 - 9/20	9/21 - 10/10
2	6/1 - 8/10	Rest	9/21 - 10/10	8/11 - 8/30	9/1 - 9/20
3			9/1 - 9/20	9/21 - 10/10	8/11 - 8/30

(R E P E A T C Y C L E)

Treatment:

Rest: No cattle grazing - except on drought years when the pasture may be grazed the last part of the grazing season. (It will not be grazed two dry years in sequence.)

Graze at range readiness: 6/1 - 8/10 - or until proper use is reached.

Graze at seed ripe: 8/11 - 10/10 - or until proper use is reached.

The system allows each spring-summer unit a minimum of one complete years rest every other year. It allows each later summer and fall units a deferment until seed ripe every year.

C. Proper Use Criteria

Although the allotment is managed under a rest-rotation grazing system it is not planned to graze any unit "to the ground".

Regional Forester Hamre's memorandum (2200) of May 12, 1972, to the Forests on the subject states:

"If our objective was to manage land for the sole purpose of maximizing domestic livestock grazing, the extremely heavy use observed on some pastures in our rest-rotation system of management might have some validity. This is not our objective on multiple use National Forest lands. Extremely heavy grazing use is neither esthetically pleasing, nor does it convey the impression that we have fully considered the habitat for big game, small animals, and birds. When I see the evidence of very heavy uniform grazing use, I also question that all of the needed coordination requirements, including protection of watershed values, have been fully considered and evaluated."

The R-4 Range Analysis Handbook - Section 60 - points out that 50 percent utilization of the species being managed for is about all the use that should be made on most ranges. The exception is wet meadows in good condition where up to 60% utilization might be made. Therefore a proper use factor of 50% will be used on the allotment.

D. Administrative Action to Implement Program

The District Ranger or Range Conservationist will check the Allotment periodically during the grazing season. They will make utilization and followup studies and note the progress of the cattle in the system. They will inform the permittees when the unit is nearing proper use and when the cattle are to move to the next unit.

The permittees will need to have a rider available to properly move and distribute cattle. The permittees will also need to place salt in proper locations and perform needed maintenance of fences and water developments.

E. Following in tabular form is the range improvements needed on the allotment.

Name	Type	Size	Location	Project Work	Estimated Cost
Blind Spring Unit #3 & Unit #4 Division Fence	New Unit boundary fence wire steel posts	1 3/4 mi.	Sec. 19 & 29, T33S, R4W	New Construction	\$ 5,800.00
Install five cattleguards on boundary's unit boundary fences	14' steel	H-20 14'	Sec. 30, T24S, R4 Sec. 13, T24S, R4W Sec. 30, T33S, R4W Sec. 29, T33S, R4W Sec. 20, T33S, R4W	Tear out old existing wooden cattle-guard & replace with new metal ones	\$10,000.00
Water Developments					
1. Barney Cove Spring & Road	Headbox Pipeline	1/2 mi.	Sec. 30, T34S, R4W	Reconstruct headbox move trough and fix breeched pond	\$ 1,200.00
2. Birch Spring Trough	Collection box and trough	100 ft.	Sec. 13, T34S, R4 1/2 W.	Install headbox and trough, fence spring source.	\$ 800.00
3. Sand Wash Spring and Pond	Collection box plastic pipe	50 ft.	Sec. 6, T34S, R4W	Install headbox run plastic pipe into pond. Fix breeched pond.	\$ 800.00
4. Blind Spring Pond	Stock water pond	50 ft.	Sec. 25, T33S, R4 1/2 W.	New Construction	\$ 300.00
5. Blind Spring Mountain Spring	Collection box 1/4 mi. 1 1/4 plastic pipe & trough	1/4 mi.	Sec. 26, T33S, R4 1/2 W.	New Construction	\$ 1,200.00

After the initial construction of the above improvements, the permittees will assume maintenance responsibilities.

F. Existing Improvements

Project Name	Type of Improvement	Size	Location	When Const.	Maint. By
West Boundary Fence	4-strand Barbed wire	7 1/2 miles	Forest Boundary		F.S.
Blind Spr. Peak Unit	4-strand Barbed wire	5/8 mile	East of Blind Spr. peak Sec. 25, 26	1954	Permittee
Barney Cove Unit Fence	4-strand Barbed wire	7/8 mile	North of Barney Cove, Sec. 18 & 13	1954	Permittee
Barney Cove Unit Fence	4-strand Barbed wire	1 1/2 miles	Southeast of Barney Cove Sec. 19 & 30		Permittee
Blind Spr. Peak Res.	Earth Fill		Northwest of Blind Spring Pk. Sec. 26	1954	Permittee
Blind Spring Sanford	Earth Fill		West of Seed Lakes Section 26	1954	Permittee
Birch Spring	Plank Trough		Head of Middle Fork of Sand Wash Sec. 31		F.S.
Birch Spring	Collection Box & Trough		Middle Fork of Limekiln Sec. 13		Permittee Planned for new const. summer of 1978
Right Fork Limekiln	Earth Fill		Right Fork of Limekiln, Sec. 24	1954	Permittee
Barney Cove Area	Earth Fill Pond		Sec. 25, (SE Croner)	1973	Permittee
Barney Cove	Spring Dev. Trough & Pond		Section 30	1973	Permittee Planned for new const. in summer of 1978
Barney Cove Pasture	Earth Fill Pond		Sec. 19, (1/4 mi. off road)	1973	Permittee
Barney Cove Pasture	Earth Fill Pond		Sec. 25, (NE Corner)	--	Permittee
Head of Sand Wash	Collection box & Earth Fill pond		Sec. 6, (NE Corner)	1973	Permittee Planned for new const. in summer of 1978

Project Name	Type of Improvement	Size	Location	When Const.	Maint. By
Sand Wash Pasture	Earth Fill Pond		Sec. 36, (East side)	1973	Permittee
Blind Spr. Pasture	Reconstructed 2 Earth Fill ponds		Sec. 25, (east side)	1973	Permittee
Cattleguards	Wooden-8'		Allot. Bdry on Southend. Barney Cove-Sand Wash fence. Blind Spr.- Sand Wash fence	1973	F.S. New cattle-guard to be installed in summer of 1978.

Existing Non-Structural Improvements

1. Limekiln	Reseeding	196 Ac.	Sections 10 & 15	1966	--
2. Barney Cove-Clark Bench-Sand Wash	Reseeding	1870 acres		1946-51	

IV. CORRELATION WITH OTHER USES

Recreation

There are no developed recreation sites within the allotment. Roads are in poor condition, therefore recreation activities, other than deer and elk hunting and some trapping, are limited. There are NFRS sites inventoried but it is doubtful if they will be developed.

Timber

There are scattered stands of timber within the allotment. Most of the ponderosa pine is commercial. The other species (mainly Douglas-fir) are non-loggingable.

Two small sales are planned within the next year. One in the Upper Sanford Creek area and the other in Barney Cove area. Both sales will be tree selection on a high risk basis. To harvest this timber will require betterment of the main road through the allotment. Road construction will improve access thus helping allotment management.

Timber harvesting will have little effect on the soils and vegetation on the allotment.

Watershed

The area is subject to high intensity storms during the summer months. Some sheet erosion occurs and severe gully erosion takes place in all the major drainages as a result of these storms.

Basically the suitable range is in fair to good hydrological condition. Careful observation of where livestock are grazing can help eliminate overuse of areas with poor watershed conditions. Better water distribution will help local "sore spots".

Wildlife

Deer and elk use the allotment year round. The past several years have seen a reduction of deer numbers so the competition between deer and livestock is minimal at this time.

Elk are part of the Mt. Dutton herd. They drift over from the Hunt Creek areas.

There are many species of wildlife including bobcat, cougar, coyote, bear, ground squirrel and other small animals. Bald and golden eagles are frequently seen in the rocky ledges along the east boundary of the allotment. Several other raptors as well as several species of song birds inhabit the area.

The proposed water development, ponds etc. and the ones that are already constructed will aid all species of wildlife in the area. Also, the various wildlife species will have exclusive use of the rested unit.

V. ALLOTMENT INSPECTION, CONTROLS AND FOLLOW-UP

Studies and inspections will continue to be made on the allotment to evaluate (1) proper use (2) range condition and trend, (3) accomplishment of management goals, (4) effectiveness of the grazing system and (5) adequacy of the stocking rate.

A. Bench Marks

A bench mark and trend study will be maintained in each of the five pastures. These studies will be reread as needed.

B. Unit Inspection Records

Form R-4 2200-15 will be completed on each grazed unit each year.

C. Check on Livestock Numbers

The cattle will be periodically counted onto the allotment or when they change units. It is not contemplated that excess numbers will be placed on the allotment. Should problems occur, dye branding or tagging can be reinstated.