

ALLOTMENT MANAGEMENT PLAN

BULL VALLEY CATTLE ALLOTMENT

Pine Valley Ranger District

Dixie National Forest

Management Plan prepared by Charles Birkemeyer, District Ranger, 4/11/73

Approved by Merlin I. Bishop, Forest Supervisor, 11/15/73

Updated by: Benton M. Smith Date 3/15/77
Range Conservationist

Recommended for
Approval by: Francis Rollins Date 3/15/77
District Ranger

Approved by: Frank Jensen Date 4/1/77
acting Forest Supervisor

I. INFORMATION

A. History

Early settlers found a herd of wild cattle ranging through the Bull Valley Mountains. The cattle had evidently escaped from wagon trains traveling the Old Spanish Trail. The settlers obtained their winter beef supply by shooting the wild cattle and packing the meat out on horses. This practice continued until the early 1890's, when the wild cattle gave way to domestic livestock.

Unrestricted numbers of cattle, sheep and horses grazed on the allotment prior to the establishment of the Forest Service. In 1910, the first efforts were made to regulate livestock use. By 1912, the grazing obligation was set at 1704 cattle from June 1 to November 15.

The following table lists the obligation on the allotment from 1912 to the present:

<u>Year</u>	<u>Cattle & Horses</u>	<u>Season</u>	<u>Animal Months</u>
1912-1915	1704	6/1-11/15	9,372
1916-1923	1130	6/1-11/15	6,215
1924-1929	1167	6/1-11/15	6,418
1930-1937	1111	6/1-11/15	6,110
1938-1945	1084	6/1-10/15	4,878
1946-1973	939	6/1-9/30	3,756
*1974-1977	471	6/1-9/30	1,884

*From 1974 to 1977, the obligation was reduced 50% (in increments of 15% in 1974, 15% in 1975, 15% in 1976, and 5% in 1977).

In 1974, all horse permits were converted to cattle permits.

Part of the south allotment boundary (from Moody Wash to Cove Mountain) was fenced in 1937. The remainder (from Cove Mountain to Gutz Peak) was fenced jointly by the Bureau of Land Management and Forest Service in 1965.

Prior to fencing, it was estimated that trespass livestock equaled those permitted. The steep, brushy terrain made it difficult, if not impossible, to control unpermitted grazing.

B. Past Management

Livestock have never been intensively managed on this allotment. The cattle traditionally entered the south end of the allotment and drifted to the higher range. The construction of a spring zone fence in 1939 made it possible to hold the cattle on the lower range until the feed was utilized. Then the gates were opened and the cattle allowed to drift to the higher ranges.

Some attempts were made to distribute cattle by salting and riding; but the allotment was so overstocked that range conditions couldn't improve. The canyon bottoms and gentler slopes were trampled severely each year. The cattle became accustomed to climbing high on the steep brushy slopes to find feed.

C. Permittees and Livestock Operations

Most of the permittees reside in Santa Clara, Utah. All are engaged in cow-calf operations. Their cattle are placed on private land near Enterprise Reservoir or Santa Clara for one to three months in the fall. Most of the cattle winter on BLM administered land in Arizona and Utah.

The majority of the permittees run cattle as a supplement to their regular income. Several are semi-retired. Others operate farms or have full-time employment.

Permittee	No. of Cattle	Season	Animal Months
J. Claud Frei & Sons	127	6/1-9/30	508
Landon & Wanda Frei	32	6/1-9/30	128
Shelby Frei	52	6/1-9/30	208
Marion J. Graf	71	6/1-9/30	284
Norman E. Gubler	55	6/1-9/30	220
Grant Hafen	21	6/1-9/30	84
M. Gale Larsen & Harold B. Schmutz	60	6/1-9/30	240
Crayton L. Leavitt	37	6/1-9/30	148
Santa Clara Cattle Co.	16	6/1-9/30	64
TOTALS	471		1,884

D. Range Analysis Data

The range analysis was completed on the allotment in 1966. The data was refined and updated in 1972. Most of the allotment is comprised of slopes over 40 percent. Vegetative cover is largely brush species with serviceberry, mountain mahogany and oak predominating. There are also sagebrush areas and some pinyon-juniper stands. Perennial grasses are scarce. Cheatgrass dominates many grass-growing sites.

Following is a summary of the acreage by present condition classes:

Suitability Class	Acres by Range Condition Class			
	Good	Fair	Poor	Total
SUITABLE RANGE				
S4	0	0	1,187	1,187
S5	0	0	1,735	1,735
S9	0	0	3,009	3,009
Sub-Total	0	0	5,931	5,931
UNSUITABLE USED RANGE				
S5	0	2,581	4,937	7,518
S9	0	0	1,567	1,567
Sub-Total	0	2,581	6,504	9,085
UNSUITABLE RANGE				
UN5				12,154
UN9				9,286
7 & 8 - Rocks & Ledges				250
Sub-Total				21,690
ALLOTMENT TOTALS	0	2,581	12,435	36,706

Trend in range condition was down or static on the entire allotment when the analysis was completed. With the 50% reduction in cattle numbers made between 1973 and 1977, and the initiation of a deferred rotation grazing system, it is believed the trend will now start in an upward direction.

E. Tentative Grazing Capacity

Since desirable grass species were so scarce on the allotment, the tentative grazing capacity of the allotment (as outlined in the Range Environmental Analysis Handbook) was computed at only 98 animal months in 1966.

In 1972, Forest Service representatives met with the permittees and informed them that the time had come to get the allotment under management. Subsequently, a Memorandum of Agreement was signed in 1973 (Appendix) which stated that cattle permits would be reduced 50% (to 1884 animal months) and the Forest Service would initiate a program of fence construction, water development, and revegetation to bring the allotment to its potential grazing capacity. Then the Forest Service would re-evaluate the grazing capacity and adjust the cattle numbers accordingly.

If this allotment is to be grazed by cattle, it must be understood that browse will constitute a significant portion of their diet. The cattle presently range "far and wide" on very steep, brushy hillsides to sustain themselves. They must continue to use these areas, even at the reduced stocking rate, to obtain sufficient forage. Therefore, the 9,085 acres classified as Unsuitable-Used by the range analysis will be treated as usable range which will sustain moderate grazing use under the proposed grazing system.

The Cove Wash Pasture, with its lower elevations, higher temperatures and less precipitation, is less productive than the other two pastures. It also has very limited potential for revegetation and water development.

The Dutchman Ranch and Lost Peak Pastures have potential for some revegetation work. They also receive sufficient precipitation that production can likely be improved under a more intensive management program.

Therefore, the allotment may sustain the present grazing obligation; if, it is placed under a management program that includes a deferred rotation grazing system, the initiation of feasible revegetation projects, and it is proven that cattle can properly use those portions of the range presently classified as Unsuitable-Used.

In accordance with the 1973 agreement, the grazing capacity will be firmed up and cattle numbers adjusted after the improvements and revegetation work are completed and the proposed grazing system has been in effect for four years.

F. Existing Improvements

A detailed list of existing improvements is on file in the district office. A brief summary follows:

1. Fences

Approximately 9.25 miles of interior fences divide the allotment into three pastures.

Approximately 36 miles of fence separate the allotment from BLM administered land and adjoining allotments.

2. Water Developments

Twenty-three springs have been developed. Many of these developments need to be replaced or repaired.

One stock pond is located north of Cove Mountain.

3. Corrals

The East Forks tagging corral is used and maintained by the permittees.

4. Study Exclosures

The Cave and Racer Canyon study exclosures are maintained by the Forest Service.

II. MANAGEMENT GOALS

1. Stabilize soils for watershed protection.
2. Start range trend in an upward direction.
3. Re-establish perennial grasses on suitable sites.
4. Improve the range to its potential for sustained-yield forage production.
- ✓ 5. Provide habitat for the deer that inhabit the allotment.
- ✓ 6. Provide a full forage supply for 471 cattle and their calves from 6/1-9/30 if feasible.

III. ANALYSIS SECTION

A. Reseeding Possibilities

Large acreages of rangeland have been successfully chained and reseeded on other allotments in the Dixie National Forest. Unfortunately, the Bull Valley Allotment does not have this potential.

It had been hoped that the pinyon-juniper in the Manera Wash area would lend itself to chaining and seeding. However, results of the BLM seeding on the adjacent Tobin Bench are not encouraging. Manera Wash is on the borderline of adequate precipitation patterns. The soils are also marginal. The small acreage which may be suitable also appears to be economically unfeasible for chaining at current cost rates.

On the higher range, precipitation and soil quality are adequate for reseeding, but the hillsides are steep with only a few acres in particular areas that can be worked with machinery.

Approximately 1200 acres in the Dutchman Ranch Pasture can be aerial seeded. Seedbed preparation and seed coverage can likely be accomplished by concentrating the cattle in that pasture for 2-4 weeks in the fall. Some of the sagebrush in that pasture is suitable for treatment with the Dixie Harrow.

Recent research and developments in the use of prescribed burning indicate that fire may be the most promising management tool for this allotment. The brushy slopes, especially in the Lost Peak Pasture, appear to have good potential for prescribed burning. The burned areas could be seeded by hand or aurally. This prescription is also considered in the management directions of the Land Use Plan for the Enterprise Planning Unit.

B. Fences

Fence construction and maintenance present a serious problem. Periodic heavy snowfall and the steep broken topography make it extremely difficult to build and maintain fences. Approximately 10 miles of the South Boundary fence, from Cove Mountain to Gutz Peak, have been almost totally destroyed by heavy snowfall. The reconstruction and maintenance of this fence must be worked out with the BLM and permittees. This fence should also be redesigned and/or relocated to minimize future snow damage.

Three miles of the Bull Valley-Gunlock Division fence, from Flat Top Mountain to Racer Canyon, also need to be rebuilt. This must be accomplished before the Dutchman Ranch Pasture can be reseeded. This fence is also located in an area of heavy snowfall.

C. Water

Water is plentiful and well distributed in the Lost Peak Pasture. Regular maintenance and repair of the existing water developments is essential.

The Dutchman Ranch Pasture has fairly good water distribution. Little Grassy Spring should be developed. The development at the Dutchman Spring should be improved and extended approximately 1/2 mile.

IV. ACTION SYSTEM

A. Grazing System

The following deferred rotational grazing system is planned for the allotment:

<u>Year</u>	<u>Cove Wash*</u>	<u>Lost Peak</u>	<u>Dutchman Ranch</u>
1	A	B	C
2	C	B	A

A - Graze 6/1-6/30, then open gates and allow cattle to drift into the Lost Peak Pasture.

B - Graze 7/1-8/31, then open gates and move cattle into the lower pasture.

C - Graze 9/1-9/30, to trample in seed.

*The Cove Wash Pasture is lower, hotter and less productive than the other pastures. It may not be feasible to hold the cattle in that pasture until June 30 or to push the cattle down into it on September 1; some latitude will be allowed for this factor.

B. Proposed Improvements

Following by priority are the planned improvements to put the allotment under management:

- ✓ 1. Rebuild 3 miles of Bull Valley-Gunlock Division fence and repair the remainder of the fences on the Dutchman Ranch Unit. (Goal 1977-1978)
2. Reseed suitable acreage in Dutchman Ranch Pasture. (Goal Fall of 1977)
- ✓ 3. Develop Little Grassy Spring, Dutchman Spring and other water sources needed in the Dutchman Ranch Unit. (Goal 1978)
- ✓ 4. Cooperate with the BLM and permittees to rebuild and maintain the South Boundary fence, the other fences, and water developments in the Lost Peak Pasture. (Goal 1979-1980)
5. In cooperation with the BLM and permittees, bring fences and water developments on Cove Wash Pasture to standard. (Goal 1981-1982)
- ✓ 6. Investigate reseeding possibilities in the Lost Peak Pasture after fences and water developments are completed.
- ✓ 7. Instigate the proposed grazing system as soon as the fencing and reseeding projects allow.

C. Correlation With Other Uses

The allotment is within the Bull Valley Management Area (2.0) and the Enterprise Reservoir Management Unit (1.2) of the Land Use Plan for the Enterprise Planning Unit.

Watershed

Soils in the Bull Valley Mountains are generally shallow to moderately deep cobbly loams and cobbly clay loams. Ground cover averages less than 50 percent. Sheet and rill erosion is active over much of the allotment. Some gullies are evident in the drainage bottoms.

The steep slopes and extensive rock outcrops contribute to moderately high runoff during high intensity summer storms. Water from this area has contributed to damaging floods downstream in Moody Wash.

This area supplies part of the water that enters Enterprise and Gunlock Reservoirs.

The proposed program is expected to improve watershed conditions by re-establishing perennial grasses, increasing total ground cover, enhancing recovery of browse species, and minimizing cattle use on the steeper slopes.

Wildlife

The allotment provides year-round habitat for mule deer, cougar, coyotes, fox, rabbits and numerous species of rodents and birds.

Deer spend the summer in the Lost Peak-Enterprise Reservoir area, then migrate into the Tobin Wash-Manera Wash area for the winter. Excessive deer numbers existed on the allotment for many years. The population "crashed" in the early 1960's and remained very low for about 10 years. It appears to be increasing slowly at the present time. A goal of management is to increase and perpetuate this deer herd.

Wildlife habitat will be improved through the implementation of the plan. Deer numbers may increase at a more rapid rate.

Recreation

Recreation use on the area is light throughout most of the year. Deer hunting is an important activity in the fall.

During the deer season many people camp along the roads and hunt. The implementation of this management plan is expected to have a favorable influence on the deer population, which will improve hunting on the allotment.

The cattle will be removed from the allotment before deer season begins.

Minerals

Several patented and unpatented mining claims are present on the allotment. Most are inactive at this time. The proposed management plan will not affect mining activities.

V. ADMINISTRATIVE PROBLEMS

One administrative problem was mentioned previously. The South Boundary Fence, separating BLM administered land and the National Forest, is in very poor condition. Grazing trespass from BLM permitted livestock has been increasing each summer. Action must be taken to coordinate BLM, permittee and Forest Service efforts toward rebuilding and maintaining the fence.

Several jeep roads on the allotment contribute to the erosion problem. Those which are not needed will be closed and reseeded. The needed roads will be drained and generally upgraded.

VI. FOLLOW-UP

A. Bench Marks

Bench marks, in the form of photo plot transects and/or three step transects have been established in each pasture. They will be read periodically to determine range trend.

B. Allotment Inspections

Form R4-2200-15 will be completed on each pasture grazed each year.

C. Check on Livestock Numbers

The cattle will be periodically counted onto the allotment. Ear tags and streamers will be used if trespass is suspected. Spot checks for unauthorized livestock will be made throughout the year.

VII. APPENDIX

A. Copy of Memorandum of Agreement

MEMORANDUM OF AGREEMENT
BETWEEN
BULL VALLEY ALLOTMENT PERMITTEES
AND
DIXIE NATIONAL FOREST

In order to improve range conditions on the Bull Valley Allotment, it is agreed that:

1. Commencing with the 1974 grazing season, all horse permits will be converted to cattle permits and horses will no longer be permitted on the allotment.
2. That all cattle permits will be reduced 50 percent in numbers. This reduction will be spread over a four year period.

$\frac{1974}{15\%} - \frac{1975}{15\%} - \frac{1976}{15\%} - \frac{1977}{5\%}$

3. The Forest Service will construct or bring to standard, existing allotment interior and exterior fences so that a three-pasture modified rest-rotation system of grazing can be started with the 1976 grazing season.
4. The Forest Service will construct new and upgrade existing watering sources where possible and practical by 1977.
5. The Forest Service will seed suitable areas after (1976) the cattle are under intensive management. (Approximately 700 acres intensive seeding and 1200 acres of broadcast seeding.)
6. The Permittees will maintain all fences and water developments.
7. The Permittees will follow the planned rotation schedule commencing with the 1976 grazing season.
8. After a four year study period (starting in 1977) the Permittees will bring their cattle numbers to the capacity of the range.
9. The Forest Service and Permittees will work up an exterior fence maintenance plan with adjoining allotments.

MEMORANDUM OF AGREEMENT - Continued

Permittees:

Date

Dixie National Forest:

Landon Fri 11-27-73 Walter J. Bishop 12-17-73
Forest Supervisor Date
Wade Spraff
Marion Spraff 11-29-73

Grant Hagen 11-29-73
J. Claude Trissone
By LeGrand Trissone 11-29-73

Elgin Spraff 11-29-73

Shelly Frei 11-29-73

Dustin Hager 11-29-73

Clair Hagen 11-29-73

Raymond Cravitt 11-29-73

Normace E. Huber 12-10-73
