

WIDTSOE C&H ALLOTMENT

ALLOTMENT MANAGEMENT PLAN

POWELL RANGER DISTRICT

DIXIE NATIONAL FOREST

REGION 4

Original Management Plan written by Bryant Christensen, D.F.R. - 3/2/70
Approved by Alvin F. Wright, Forest Supervisor - 3/13/70

Plan Updated By: Robert S. Hardman Date 2-1-77
Range Conservationist

Approval Recommended By: Walter A. Gerson Date 2-1-77

Plan Approved By: Frank Jensen Date FEB 2 1977
ACTING FOREST SUPERVISOR

I. GENERAL INFORMATION

A. Description

The Widtsoe C&H Allotment is located approximately 4 miles northwest of the old town of Widtsoe in Johns Valley and includes portions of the North Fork, Prospect Creek, Rock Creek, Cherry Creek and the Little Cottonwood Creek drainages. All these drainages are tributaries to the East Fork of the Sevier River which borders the Allotment on the east side.

The topography of the Widtsoe Allotment is flat to moderately rolling varying in elevation from 7,000 to 7,800 feet. Approximate annual precipitation is eleven inches.

The Widtsoe Allotment consists mainly of 4 land types with their associated vegetation species and soil characteristics. These are 1. Steep sideslopes of hills and mesas. Dominate vegetative species include big sagebrush, rabbitbrush, western wheatgrass, needle grass, blue grama, and seeded crested wheatgrass. Main soil textural class is gravelly loam. 2. Floodplains: Main vegetative species include big sagebrush, rabbitbrush, western wheatgrass, blue grama and seeded crested wheatgrass. Silt loam and heavy loam make up the main soil textural classes. 3. Long pediments: Dominate vegetative species are black sagebrush, big sagebrush, rabbitbrush, slender wheatgrass, Indian ricegrass, mutton bluegrass and some pinyon and juniper. Gravelly loam and gravelly sandy clay loam are the dominate soil types. 4. Pediment sideslopes: Big sagebrush, rabbitbrush, slender wheatgrass, Indian ricegrass, cactus and some pinyon-juniper are the major vegetative species. Gravelly loams and loams make up the main soil classes.

The Widtsoe Allotment contains 13,056 acres of National Forest land. The allotment is surrounded by State land, private land and other National Forest lands.

At present, two permittees, Burns Black & Gregory Black, graze 339 head of cattle from 6/1 - 10/10 for 1,469 animal months on the allotment. The allotment is also one of the most important wildlife ranges on the District.

II. HISTORY AND CURRENT STATUS

A. Past Actual Use

Actual use of the area now known as the Widtsoe C&H Allotment is hard to determine because it was not described as a separate unit and included inside the National Forest Boundary until 1960. Records prior to that time are sketchy. However, the general history of Johns Valley is useful in understanding the past use.

The first recorded use was by dairymen who brought their herds to the valley during the summer and grazed them near the mouths of the canyons or wherever water could be found. About 1910 the first land was broken for farming. This farming consisted mostly of raising crops near the streams that flowed into the valley using the water for irrigation.

From 1912 to 1915 the valley was settled rapidly by settlers intending to dry farm. In 1915 the population reached its peak of approximately 1,200 people. About 800 lived at Widtsoe and the remainder lived on homesteads throughout the valley. Lack of sufficient moisture to support dry farming operations soon forced the settlers to move.

By 1937 only 24 families remained in the valley. Beginning in 1935 most of the homesteads were purchased by the government through the Resettlement Act and returned to federal ownership. During this period livestock grazing was not controlled to any significant degree.

On October 27, 1960, Executive Order Number 10890 gave sole jurisdiction of 14,825 acres to the Department of the Interior and 11,783 acres to the Forest Service. The purpose of the division was to simplify the administration and management. When the Forest Boundary was extended to include this Allotment it also included approximately 1,603 acres of State and private land. The State lands have subsequently been exchanged and are now included as National Forest land. The private land still remains in private ownership but has been fenced out of the Allotment except for 10 acres. This small parcel is Patent #970295 and is located in the SW 1/4 SW 1/4 SW 1/4 of Section 5, T34S, R2W.

In 1962 the Smith Canyon C&H Allotment was closed to livestock grazing and the permittees were offered and accepted temporary permits on the Widtsoe Allotment. They grazed 109 head of cattle for approximately four months each summer. These cattle used the Allotment until 1974 when they were transferred to the newly reseeded areas on the Mud Springs Allotment.

In the late 1960's a major range spraying and reseeding program was undertaken on the allotment. This program included spraying, chaining and/or reseeding 8,196 acres.

In 1971, after the reseeding was established, the Doyle V. Cottam permit for 240 head of cattle was transferred from the Escalante District to the Allotment. (An agreement covering this change is in his permit file). This shift of cattle resulted in getting several management systems operating on the Escalante District.

Subsequently Mr. Cottam acquired other cattle and permits on the District and they were transferred to this allotment. Mr. Cottam eventually sold some of his cattle and waived some of his permit to his son-in-law, Sherrell Ott.

In 1979, Mr. Cottam and Mr. Ott sold their cattle and waived their permits to Burns K. Black and Gregory K. Black of Antimony, Utah.

Following Table Shows Past Actual Use From 1961 through 1976

YEAR	SEASON	NO. OF CATTLE	A.U.M.'s
1961	6/1-6/15	211	106
1962		171	144
1963	5/11-8/10	109	327
1964	5/11-8/10	109	327
1965	5/11-9/10	109	327
1966	5/11-8/10	109	327
1967	5/11-10/25	109	380
1968	5/17-8/17	109	327
1969	5/11-8/20	109	366
1970	5/11-8/20	109	366
1971	6/1-9/30	349	1398
1972	6/1-9/30	349	1396
1973	6/1-10/16	349	1582
1974	6/1-10/15	349	1571
1975	6/2-10/15	339	1503
1976	6/1-10/14	339	1514

B. Past Management

Prior to 1962 the allotment was essentially grazed season long. Water was scarce so most of the livestock use occurred around existing water. From 1964 to 1971 numerous projects such as the construction of ponds, pipelines, chaining and reseeding projects were accomplished. Protection fences constructed with the seeding projects in 1968 divided the Allotment into three pastures. These pastures are used today in a 3 unit rest rotation grazing system.

C. Current Status of Permits and Ranch Operations

Table I Present Permittees and Permitted Forest & BLM Use

	<u>F.S. Term Permit</u>		<u>Acres</u>	<u>BLM Licenses</u>	
	<u>Number</u>	<u>Season</u>		<u>Number</u>	<u>Season</u>
Burns K. Black	200	6/1 - 10/10	867	237	11/1 - 6/15
Gregory K. Black	139	6/1 - 10/10	602		
Total	339		1469		

Both permittees run crossbred cattle, however, the hereford breed comprises most of the cows. Both permittees are engaged primarily in a cow and calf operation. They are dependent upon National Forest land to round out their year long operation. A combination of BLM grazing, privately owned and leased pasture and commensurate ranch property are used during the time cattle are off the Forest.

III. RANGE CONDITION AND TREND

The range allotment analysis and mapping was completed in 1966, however that analysis is now out dated since most of the suitable range has been sprayed and/or chained and reseeded. Following is the present acreage by estimated suitability, condition and trend classification:

<u>Suitability Classification</u>	<u>Acres</u>	<u>Condition</u>	<u>Trend</u>
Suitable	7196	Good	Stable and up
	1000	Fair	Stable
(Sprayed and/or chained and seeded)			
Suitable (Native Range)	1139	Fair	Stable and up
Suitable (Rabbitbrush etc.)	500	Poor	Stable
Unsuitable	<u>3221</u>	Not Classified	
Total acreage	13,056		

IV. GRAZING CAPACITY

The Allotment has been grazed under a rest-rotation grazing system for approximately six years (two rotation cycles). This period has shown that the forage production on the Allotment varies greatly from year to year, i.e. depending primarily on the amount and timing of precipitation received.

With these wide fluctuations in forage production, the Allotment has to be stocked conservatively with cattle, thus leaving enough forage available for the antelope, deer and elk that use the Allotment.

Our records and observations indicate that the presently permitted 339 head of cattle can have a full forage supply for the 1,469 permitted a.u.m.'s even on the low precipitation years and still meet the other multiple use requirements for the allotment. Therefore, the Allotment is considered properly stocked.

V. MANAGEMENT GOALS

The management goals for the Allotment are:

1. Maintain the forage resource in a healthy condition, keeping the trend static or upward.
2. Provide a full forage supply for the permitted 339 head of cattle and their calves from 6/1 - 10/10 for 1469 A.U.M.'s.
- 3. Provide for adequate forage and cover for the antelope, deer and elk that inhabit the Allotment.
- 4. Provide suitable habitat for the sagegrouse that inhabit the Allotment.
5. Work with the permittees so they properly maintain the structural range improvements, place salt in proper locations and keep cattle in the designated pasture.
- 6. Provide additional water in areas of the Allotment that currently have little or no stock water available. Provide for wildlife water needs also.
7. Maintain the present 3-unit rest rotation grazing system.
8. Plan and coordinate for wildlife habitat needs on remaining spray projects.
9. Control unauthorized cattle grazing from adjacent State land. In addition to policing efforts, this will require heavy maintenance on the Forest Service boundary fence separating Sections 7 & 18, T33S, R2W.

10. Maintain a permanent trend study on a key area within each unit of the allotment.

VI. ACTION SECTION

A. System to be Used

Protection fences constructed with seedings in 1968 divided the Allotment into three pastures (Cottonwood, Upper Prospect, and Lower Prospect). These pastures will be used in a three unit rest rotation grazing system. Because of the uniform elevation, range readiness will occur in all pastures at approximately the same time. Following is the planned sequence of use:

Year	Pastures		
	Cottonwood	Upper Prospect	Lower Prospect
1	Rest	8/1-10/10	6/1-7/31
2	6/1-8/10	Rest	8/11-10/10
3	8/11-10/10	6/1-8/10	Rest

(Repeat Cycle)

Treatment

Rest: No cattle grazing - Except on drought years when the pasture may be grazed the last part of the grazing season.

Graze at Range Readiness: 6/1-8/10 6/1-7/31
 Graze at Seed Ripe: 8/1-10/10 8/11-10/10

These dates are tentative and may be changed due to vegetative conditions.

The system allows each pasture a minimum of one complete year rest and one deferment until after seed ripe every three years. This will promote plant vigor, litter production, seedling establishment and overall increase of forage production.

B. Tentative Carrying Capacities of Units (Average Year)

Pasture	Cottonwood	Upper Prospect	Lower Prospect
Est. Cow Mo.	800	840	600

C. Range Development Program

Following is the structural and non-structural improvements:

1. Existing Structural Improvements

NAME	TYPE	LOCATION	DATE
Beebe Springs Pipe Line (3.5 Miles)	Plastic Pipe	Lower Prospect Unit	1964
Stock Water Pond (4)	Reconstructed	Cottonwood Unit	1962-1968
Boundary Fence	10 1/2 miles 4 wire	F. S. Boundary	1962
Boundary Fence	1 mile-3 wire	F. S. Boundary (SE Cor.)	1968
West Boundary	3 miles-3 wire	Allotment Boundary	1968
Beebe Springs Fence	4 miles-3 wire	Between Cottonwood & Upper Prospect Units	1968
Prospect Fence	2 miles-3 wire	Between Upper & Lower Prospect Units	1968
Prospect Fence	1 mile-4 wire	Between Upper & Lower Prospect Units	1968
Prospect Pipeline	3 miles 1 1/4' Pipe-4 ponds	Upper Prospect & Lower Prospect Units	1970
Cherry Creek Fence	2 1/2 miles 3 wire	West Allotment Bdry.	1969
Lower Beebe Springs Pipeline 2000'	1 1/4 plastic pipe 4 stock ponds	Beebe Springs Drainage	1972 & 1973
Beebe Springs Waterline	Removed troughs Built 6 ponds replaced 3/4" pipeline, installed 2 new headboxes	Beebe Springs Drainage	1975
Beebe Springs Headbox	Reconstructed Install headbox & layed 200' of 4" perforated pipe	Beebe Springs	1975

2. Existing Non-structural Improvements

<u>Treatment</u>	<u>Location</u>	<u>Acres</u>	<u>Cost</u>	<u>Year</u>
Plowed, harrowed etc.	Cottonwood Unit	500	\$11,300	62-63
Spraying (2, 4-D)	Parts of all three units	5500*	\$19,000	66-67
Chaining (with Dixie Sager) and Seeded	Lower Prospect and Upper Prospect Units	4752	\$29,400	1968
Chaining (with Dixie Sager) and partially seeded	Cottonwood Unit	2944	\$18,000	1970

*Most of the sprayed area was subsequently chained and part were seeded with crested wheatgrass and some Russian wildrye. Therefore the treated area is 8196 acres.

3. Proposed Improvements

The basic developments on the Allotment have been completed. However, like all allotments, there are always additional opportunities to make improvements. Some additional work is planned, as funds become available and priority work is completed on other allotments.

Proposed Structural Improvements

<u>Name</u>	<u>Type</u>	<u>Size</u>	<u>Location</u>	<u>Project Work</u>	<u>Estimated Cost</u>
Reynolds Spring	Spring Dev. & Pond	100 ft.	Section 7 T34S, R2W	New Development	\$400
Lower Beebe Pipeline Extension	Pipeline Plastic	1 mile	Sec. 20,29 30, T33S, R2W	Crawler Tractor Laying Pipeline	\$1700
Little Cottonwood Spring	Headbox Pipeline	1/2 mi.	Sec. 14&24 T33S, R3W	New Development	\$ 700

Eventually, there will be a need for maintenance spraying of sagebrush and rabbitbrush. However the needs of wildlife will be fully coordinated before any work is done. Pure grass monocultures will be avoided as they become infected with black grass bug (Labops). These insects already occupy the plowed and seeded area in the Cottonwood pasture (Goat Ranch area).

VII. CORRELATION WITH OTHER USES

Two primary goals were set for the Allotment when it came under Forest Service administration. These are:

1. Move cattle from an overgrazed allotment to this allotment and --
2. Provide additional habitat for wildlife, especially the re-introduction of antelope to Johns Valley.

Both of these goals have been accomplished. The planned Multiple Use coordination for the Allotment follows:

Watershed

The area is subject to high intensity storms during the summer months. Some sheet erosion occurs on the eastern portion of the Allotment. However the large reseeding projects have checked most erosion problems. The goal now is to keep the vegetation in a healthy condition.

Wildlife

Deer and elk use is common along the upper edge of the Allotment during the fall, winter, and spring months. Considerable increase in elk use has been observed the past few years; especially in the late winter and early spring months. Competition with livestock is not significant at this time, but it may require considerable coordination in the future if the elk herd increases.

On December 17, 1975, 70 head of antelope from Parker Mountain were released in the Cottonwood pasture below Beebe Springs. Since the antelope is mainly a browse and forb eater, little competition for forage with livestock is anticipated. Fences sometimes serve as a barrier to these animals. Most of the pasture fences are 3 strand (rather than 4), thus reducing the barrier problem considerably. Other boundary fences which may present barrier problems can be upgraded to lessen the impact.

In planning any spray projects, maximum edge effects and plant diversity will be created to aid the antelope and other wildlife. The antelope are to be maintained at a number which does not cause major conflict with livestock grazing. The exact number will be adjusted in accordance with subsequent findings from habitat evaluation studies and upon agreement between the Utah Division of Wildlife Resources and the Forest Service.

Some sage grouse are found on the Allotment. Beebe Springs and the surrounding meadow provide excellent habitat for them. The possibility of fencing an additional portion of the spring and meadow area to enhance sage grouse habitat will be evaluated.

The proposed water developments, 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.

A large colony of Utah Prairie Dogs is located east of the Allotment near the East Fork of the Sevier River. At the present time the population appears to be increasing.

Golden Eagles are common on the Allotment and bald eagles are fairly common during the winter months.

Timber

There is a small amount of commercial ponderosa pine timber located on Cougar Ridge. Access to the timber is through the Allotment. A few areas along the upper edge of the Allotment supports stands of pinyon pine that could possibly be utilized as Christmas trees.

Recreation

Elk and deer hunters camp at Beebe Springs during the hunting season. There are also isolated camps at the mouths of the canyons. Coyote and cougar hunters and trappers "patrol" the roads yearlong trapping, calling and looking for prey animals.

With the antelope now inhabiting the Allotment more "sightseers" can be expected. Jack rabbit and cottontail hunting is also popular on the Allotment.

VIII. ALLOTMENT INSPECTION, CONTROLS AND FOLLOW-UP

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

A. Bench Marks

A bench mark and trend point will be maintained in each of the three pastures. These studies will be reread as needed on the rested pasture.

B. Unit Inspection Records

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

C. Utilization Standards

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The management system is designed so that the physiological needs of the grasses are met. However it is not planned to "grub" any unit to the ground. The cattle will be moved to the next unit when an acceptable degree of use has been achieved.

D. 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.