

CASTLE VALLEY - HENRIE KNOLLS

MANAGEMENT PLAN

DIXIE NATIONAL FOREST

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I. INFORMATION SECTION

A. History and Current Status

The area now known as the Castle Valley - Henrie Knolls allotment has been grazed by livestock owned by the Hatch family since before the Dixie National Forest was created. It is a combination of six separate pieces of National Forest land. Private land owned by the Hatch's borders much of the National Forest land on this allotment.

Ira W. Hatch was the original permittee. In 1928, he transferred some of his sheep and this allotment to his son Houston Hatch. In 1974, the permit was transferred to his son Ira William (Bill) Hatch.

There have been several changes in sheep numbers, season of use, and boundary changes over the years. The most recent change was in 1983 when sheep numbers were changed from 800 to 622 head. The grazing season was increased so the sheep months remained the same. This change was requested by the permittee.

B. Ranch Operation

Mr. Hatch has a ewe-lamb operation. When the sheep are not on the National Forest, they graze on private land and BLM land. He has a BLM permit from October 15 to May 15 in Arizona. However, the last few years he has grazed the sheep with those of other family members on BLM ranges near Milford. They lamb the sheep on private land.

The current permit is as follows:

<u>Permittee</u>	<u>Sheep Number</u>	<u>Season</u>	<u>Sheep Months</u>
Ira William Hatch	622	7/1 - 9/30	1866

(It is to be noted, the sheep will be on private land, at the permittees option, some of this time.)

C. Range Condition and Trend

Range analysis was completed in 1970. That analysis has been updated to reflect current conditions on the allotment. Following is a summary of vegetative types, suitability and condition classes.

Condition Class	S1	S4	S5	S6	S10	(S)6	(S)10	Total Suitable	Non Range	TOTAL
Excellent							84	84		84
Good	82	268			32			382		382
Fair	458	346	29	946	178			1957		1957
Poor		28	120			352		500		500
Non Range									7992	7992
TOTALS	540	642	149	946	210	352	84	2923	7992	10,915

D. Estimated Grazing Capacity

Based on range analysis, and follow up data, there is sufficient capacity on the allotment to handle the current permitted sheep months and meet wildlife requirements. However, over the last 10 years sheep numbers have fluctuated annually below the number permitted and sheep have used the private land in conjunction with the allotment during the permitted season making it difficult to firm up allotment grazing capacity. Followup studies will continue to evaluate condition and trend and to firm up capacity on the allotment.

## II. MANAGEMENT OBJECTIVES

The overall management objective of the Castle Valley - Henrie Knolls allotment is to make the most efficient and sustained use of the range resource by grazing sheep for maximum livestock production consistent with the needs of the other resources and users.

The specific management objectives are:

- ✓ A. Manage the allotment to meet physiological needs of the key forage species.
- ✓ B. Keep range in static or upward trend.
- ✓ C. Minimize conflict between grazing and Mammoth Creek subdivision.
- ✓ D. Protect tree plantation areas until the trees are established.
- ✓ E. Provide for wildlife requirements.
- F. Protect aesthetics along the Panguitch Lake - Cedar Breaks highway.

### III. ANALYSIS SECTION

#### A. Management System

Several management systems have been tried on the allotment over the years. Because the allotment is in six different pieces and because the Hatch's private land is used in conjunction with some of it, a simple deferred grazing system has proven to be the most workable system for the allotment.

Grazing use is under on and off provisions with the permittees' private land which is located in the West Fork of Asay Creek and in Castle Valley. Sheep go on the allotment on July 1. The beginning date is normally after seed development on the lower (Little Mountain, Houston Flat and Henrie Knolls) areas and seed maturity on the upper (Dry Valley and Castle Valley) areas. Permitted use will begin on the Little Mountain unit and proceed to Castle Valley.

The grazing areas in sequence of use are as follows:

1. Little Mountain
2. Houston Flat
3. Henrie Knolls
4. Dry Valley
5. Castle Valley

The Houston Flat unit is so small that total use will only amount to two days.

Each unit will be grazed until proper use is reached, then the sheep will be moved to the next unit. The sheep will be removed from the allotment at proper use of key forage species or on September 30, whichever occurs first. When the sheep leave the Forest, they will go to private land in Castle Valley for a short time and then trail to Panguitch. (Emphasis is made that the sheep will be grazing on the Hatch's private land some of this permitted, 7/1 - 9/30, time. This is the permittees option and is not regulated or credited by the Forest Service.)

#### B. Proper Use Criteria

The R-4 Range Analysis Handbook (Section 60) points out that 50 percent utilization of the species being managed is about all the use that should be made on most ranges. The exception is wet meadows in good condition when up to 60 percent utilization might be made. Therefore, in keeping with Regional direction, a proper use factor of 50 percent of the palatable grasses growing on the suitable range will be used.

On this allotment, the bluegrasses (*Poa* spp.) and mountain muhly (*Mulenbergia montana*) are some of the more palatable grasses.

C. Constraints

The major constraint is the lack of livestock water on some areas. Another constraint is having the sheep cross Mammoth Creek at the summer home sub-divisions when going between Henrie Knolls and the other two units. The Castle Valley unit is narrow above Mammoth Spring because of the steep slopes. The sheep can graze up along the creek to where it flattens out. It is better to graze the area this way than to trail sheep up and down the steep slopes to water.

D. Administrative Action

The allotment is under mangement.

District personnel will check the allotment periodically during the grazing season. They will make utilization and follow up studies and note the progress of the sheep in the system. They will inform the permittee when the unit is nearing proper use and when the sheep are to move to the next unit and be removed from the allotment.

E. Range Development Program

1. Existing Improvements

<u>Project Name</u>	<u>Type</u>	<u>Size</u>	<u>Location</u>	<u>Constructed</u>	<u>Maintained By</u>
Mammoth Creek Subdivision	Cattleguard	14'	Sec. 4, T37S, R7W	-	F.S.
Dry Valley Upper	Reservoir	Small	Sec. 30, T36S, R7W	1940	Permittee
Dry Valley Lower	Reservoir	Small	Sec. 29, T36S, R7W	1951	Permittee
Houston Flat	Reservoir	Small	Sec. 14, T37S, R7W	1941	Permittee
Yellow Jacket	Trough- pipe	Tub-200' Plastic Pipe	Sec. 30, T36S, R7W	1968	Permittee

There are some fences separating private land from Forest land.

2. Proposed Improvements

<u>Project Name</u>	<u>Type</u>	<u>Size</u>	<u>Location</u>	<u>Constructed By</u>	<u>Maintained By</u>
✓ Yellow Jacket	Pipeline Trough	2½ Mi.	Sec. 29, 30, 32, 33, T35S R7W	FS	Permittee
Blue Spring Mtn.	Pond	Small	Sec. 9, T36S, R7W	F.S.	Permittee
Little Mountain	Pond	Small	Sec. 21, T37S, R6W	F.S.	Permittee

If private land owners and subdividers would fence their property, it would allow the sheep to use some areas not now used and allow them to water additional places. The permittee's sheep haven't used the areas or watered in them because of the problems involved. These areas are the Aspen Highlands subdivision and the private property in Tommy Creek.

A fence along Mammoth Creek near the bridge needs to be removed and put on the private land boundary. Moving the fence would allow the sheep to water there.

E. Correlation With Other Uses

The Castle Valley - Henrie Knolls allotment is located in the Bunker Creek, Mammoth and Bowers Flat management units of the Cedar Mountain management area and the Hatch Mountain management unit of the Asay management area of the Markagunt Plateau planning unit.

Following are specific coordination measures:

Timber. The allotment is an important timber producing area on the District. Timber has been sold and some harvested. Some thinning and planting has been done. Forage production is expected to increase with logging and thinning as a result of reduced competition. The forested areas need to be protected until the trees get large enough that they can't be damaged by sheep.

Recreation. An undeveloped campground exists around Mammoth Spring. Recreationists camp and fish along the creek in this area. Sheep do not use the upper Mammoth Creek area, consequently, grazing does not conflict with recreation use in this area.

Sheep trail across Mammoth Creek on a bridge near the mouth of Spring Hollow when trailing from Henrie Knolls to Dry Valley. The sheep are trailed through the area rather than grazed, therefore, there are no apparent conflicts with private land owners or recreationists.

Watershed. The planned grazing system is expected to increase ground cover and the number of plants. The soils should become more stabilized and more water should enter the soil. Soil productivity is expected to increase over the years.

Wildlife. Deer is the only big game species of any number found on the allotment. Coyotes are the primary predator animals. An occasional wild turkey may be seen in the southeast part of the allotment.

The grazing system, and the development of watering facilities should improve the range for wildlife.

Land Uses. With all the summer homes located near the Mammoth Creek and the subdivision unfenced, it's important that the sheep are herded away from this area.

IV. FOLLOW UP PROGRAM

A. Allotment Inspection

Periodic inspections will be made on the allotment to check compliance with annual plan of use and to determine proper use in each unit. As part of the inspection, Form R4-2200-15 will be completed as often as practical.

B. Studies

Grazing impact studies will be used as needed in conjunction with R4-2200-15, unit examination record.

There are Parker 3-Step Transects located in Castle Valley and in Dry Valley. These studies will be reread periodically.

C. Counting

The sheep will be periodically counted onto the allotment or when they change units.

The permittee will be advised annually in writing of the units to be grazed and the coordination needed.