

ALLOTMENT MANAGEMENT PLAN

SPITZ HILL ALLOTMENT

WILLIAMS RANGER DISTRICT
KAIBAB NATIONAL FOREST

Prepared By: Gary Hase, Jr. Date 2/10/06
Gary Hase, Jr.
Rangeland Management Specialist

Agreed to/ Juliana Grantham 2/10/06
Reviewed By: Allen Grantham Date 2-10-06
Allen Grantham/Juliana Grantham

Approved By: M. Stephen Best Date 2/15/06
M. Stephen Best
District Ranger, Williams Ranger District

I. INTRODUCTION

The Spitz Hill Allotment is located north and west of Parks in the eastern portion of the Williams Ranger District and contains approximately 13,710 acres. The Spitz Hill Allotment is bordered on the south by old Route 66 and Forest Road 141 (Spring Valley Road) runs through the eastern portion of the allotment. Adjacent grazing allotments include the Elk Springs and Government Mountain allotments to the north, the Government Prairie allotment to the east and south, and the Sitgreaves allotment to the west.

The Spitz Hill allotment is dominated by a ponderosa pine forest community (66%). Other vegetative communities present include: prairie grassland (15%), mixed conifer forest (17%), and mountain grassland (2%). The dominant topographic features are Spitz Hill, Wright Hill, Government Hill, Government Prairie, and the eastern slopes of Sitgreaves Mountain. Duck Lake is an ephemeral wetland (defined by the presence of hydric soils) located adjacent to the west side of the allotment. Approximately 8 acres of the ephemeral wetland extend into the Spitz Hill pasture of the allotment. Dominant grass species on the allotment include: blue grama, Arizona fescue, mountain muhly, pine dropseed, and bottlebrush squirreltail. Common shrub and herbaceous species include rabbitbrush, broom snakeweed, ceanothus, pussy toes, sandwort, globemallow, and buckwheat.

II. GOALS AND OBJECTIVES

The four goals and objectives of grazing management on the Spitz Hill allotment are as follows:

- 1) To provide forage for domestic livestock as directed by the Forest Plan.
- 2) To maintain or improve range and soil conditions on the allotment.
- 3) To improve the cool season grass component on the allotment.
- 4) To improve cattle distribution on the allotment to prevent re-grazing of plants.

III. MANAGEMENT STRATEGY

Grazing System

The Spitz Hill Allotment is divided into five main grazing pastures (Spring Valley, Sawmill, Spitz Hill, Randall, and Curry) and one smaller shipping pasture (Shipping). The allotment will be managed utilizing a deferred rotation system with a grazing period of approximately 30 days in the Spring Valley, Sawmill, Spitz Hill, and Curry pastures. Randall pasture, due to its smaller size, will have a grazing period of approximately 15 days each year. The Shipping pasture will be used for approximately 10 days at the end of each grazing season, usually overlapping with the last 10 days of use in the scheduled main grazing pasture. The grazing schedule identified on the Pasture Use Plan (pages 7 and 8) is a guide and should be followed as closely as possible in order to achieve the identified goals and objectives.

The seasonal deferment will provide spring growing season rest to each pasture four years out of every five. The shorter grazing periods in Curry and Randall pastures will decrease the potential for grazing the regrowth of important cool season grasses and provide additional recovery time. This management strategy is expected to improve the vigor and density of the cool season grasses and the overall condition and trend of the allotment.

Permitted Numbers

The permitted numbers will be 195 adult cattle and the permitted season of use will be from June 1 to October 16. This permitted use equates to 885 Animal Unit Months. The permitted numbers of 195 adult cattle may be converted to yearlings using a conversion rate of 0.7 yearlings/adult cow (195 adult cattle = 279 yearlings). A combination of adult cattle and yearlings may be authorized provided the use does not exceed 885 Animal Unit Months during a permitted season of use.

As previously mentioned, the permitted season of use, and the typical season of use, will be from June 1 to October 16. However, if appropriate conditions exist on the allotment (ex. range readiness, abundant forage, etc.), the season of use may be extended to include an early on date and/or a later exit date. The earliest on date authorized will be no sooner than May 15 and the latest exit date will be no later than October 31. If the season of use is extended, the authorized livestock numbers will be adjusted so as not to exceed 885 AUM's.

Allowable Utilization

The average allowable utilization in key areas on the allotment will be 40 percent within the prairie pastures (Curry and Randall) and 35 percent within the timbered pastures (Spring Valley, Sawmill, and Spitz Hill). The average allowable utilization in upland areas and within Mexican spotted owl (MSO) habitat will be 20%.

Specific Management Measures

1. Regardless of the normal scheduled use within the Spitz Hill pasture, the livestock accessible portions of the Duck Lake ephemeral wetland will not be stocked when standing water is present or when the soils are saturated. Soils will be assessed ten days after the disappearance of standing water for saturation and range readiness. If the permittee desires to use the Spitz Hill pasture when standing water is present or saturated soil conditions exist, the permittee may construct a temporary electric fence to exclude livestock from the ephemeral wetland. This temporary electric fence will be removed when livestock leave the pasture.
2. No human activities or construction actions associated with livestock grazing will occur in Mexican spotted owl Protected Activity Centers during the breeding season (March 1 to August 31).

IV. LIVESTOCK DISTRIBUTION AIDS

All developed waters within the Spitz Hill Allotment should be maintained in order to help distribute livestock effectively throughout the allotments. Additionally, portable sites for haul water may be needed and should be used as necessary to assist in livestock distribution. The following requirements will apply to portable haul water locations:

- 1) Coordinate with the District Range Management Specialist to identify portable water haul locations for individual pastures prior to the grazing period.
- 2) To aid in livestock distribution, the portable water haul location should generally be in areas of light forage utilization.
- 3) Generally, portable water hauls will not be located at sites used in previous years or in areas with fragile and erosive soils.
- 4) Portable water haul locations will be moved when the desired utilization levels have been obtained.
- 5) Portable haul water storage tanks and troughs will be removed when livestock leave the pasture.

Salt, protein blocks and supplement will be used as a tool for rangeland management to aid in the distribution of livestock. They will be used in a manner to spread utilization throughout the pastures within the allotment. Salt, protein block and supplement locations will be changed annually and they will not be placed within $\frac{1}{4}$ mile of water, or within areas of depleted rangeland, erosive soils, or sensitive plant species. Additionally, mineral and protein supplements will not be placed in or adjacent to Mexican spotted owl protected or restricted habitat.

V. RANGE IMPROVEMENTS

A) Existing Structures

Range improvements (fencing, waters, handling facilities, etc.) are critical components of any grazing management plan. All range improvements assigned to the permittee (Inventory and Maintenance Responsibility, page 9) need to be maintained in order to facilitate proper management of the allotment. Permittee maintenance responsibilities are also identified on the allotment map (page 10).

Any ground disturbing range improvement maintenance activities will require an archaeological survey and heritage clearance prior to beginning any maintenance work.

B) Structural Improvements

1. Fencing – Realignment of Shipping/Curry pasture fence

Remove approximately 0.2 miles of the existing north/south pasture fence between Shipping pasture and Curry pasture. Section to be removed begins at the southwest corner of the Shipping pasture and continues north approximately 0.2 miles. Construct approximately 0.1 miles of new east/west fence so that the existing south boundary fence of the Shipping pastures continues west and ties in to the Right-of-Way fence along the Spring Valley road (FR 141). Permittee will be responsible for removing the old fence and construction of the new fence. The Forest Service will provide materials for the new fence construction. An archaeological survey and heritage clearance must be completed prior to beginning work on this project.

2. Removal of existing fence in Randall pasture

Remove of approximately 0.6 miles of existing north/south fence in the western portion of Randall pasture. This fence is no longer needed for management purposes. Permittee will be responsible for removal and disposal of this fence.

3. Water – Roadside Pit Tanks

Construct five new roadside pit tanks within the Spring Valley (2), Sawmill (1), and Spitz Hill (2) pastures. The purpose of these additional waters is to improve cattle distribution and provide additional water sources for wildlife. The general locations of these pit tanks are shown on the allotment map (page 9). The specific locations need to be determined and an archaeological survey and heritage clearance must be completed prior to beginning any construction activity. Additionally, construction of the pit tank near Schultz Pass (Spring Valley pasture) must be built to meet the scenic integrity objectives for SIO-2, so that the structure is not evident to the casual observer. The cost of constructing these improvements will be shared on an approximate 50/50 basis between the permittee and the Forest Service. This could be accomplished by the Forest Service constructing 2 or 3 of the tanks and the permittee constructing the remainder.

C) Non-Structural Improvements

There are no non-structural improvements scheduled for implementation.

VI. MONITORING ACTIONS

Collection and interpretation of utilization information is based on two documents; *Principles of Interpreting Utilization Data* (University of Arizona, 2005) and the *Kaibab National Forest Guidelines for Obtaining and Analyzing Use Information* (2005).

Monitoring of utilization in key areas, uplands, and MSO habitat will be conducted in each pasture at the end of the growing season to ensure compliance with the established utilization standards. Grazing intensity will be assessed in key areas and upland areas at least once during livestock use in each pasture. This is to assure that grazing intensity is not exceeded and to aid in identifying timing of cattle rotation through pastures. Within Mexican spotted owl habitat, grazing intensity monitoring will occur prior to livestock entering the pasture, during livestock use, and when livestock leave the pasture to assure that grazing intensity is limited to light use.

Range condition and trend monitoring will be conducted on the allotment using Parker Three-Step clusters, Pace Frequency transects, and Paced transects. Parker Three-Step clusters and Pace Frequency transects will be read approximately every 10 years. Paced transects will be read at approximately 5 year intervals.

Noxious weeds will be identified during field inspections and follow-up action will be implemented according to the *Coconino, Kaibab, & Prescott National Forests Noxious and Invasive Weed Strategic Plan 1998, Amended 2002*.

VII. DROUGHT MANAGEMENT

Climate in the Southwestern United States is highly variable with periods of below average precipitation and drought being relatively common. Management of livestock during these periods is extremely important in order to protect soils, long-term site productivity, water quality, wildlife, and other Forest resources and activities. To address this issue, the following guidelines have been established for the Kaibab National Forest:

1. Annual and/or seasonal adjustment of authorized livestock numbers to match the current year's forage production and conditions. Required or voluntary reductions in livestock numbers due to drought conditions will be documented as non-use for range improvement purposes, not for personal convenience.
2. Livestock use of a pasture will only be authorized when the current year's forage production exceeds 100 pounds (dry weight) per acre within the key areas of the pasture. If there are no pastures on the allotment that meet this criterion, grazing will not be authorized on the allotment.
3. The grazing management strategy that is established on the allotment (rest-rotation, deferred rotation, etc.) will be maintained.
4. The utilization standards established for the allotment will be maintained and enforced. In cases of severe drought, and during severe drought recovery periods, the established utilization standards may be reduced.

5. Permittee may be required to haul water to portable troughs to avoid depleting existing water sources.
6. Following severe drought, re-stocking to full capacity will not occur until after a minimum of one growing season rest. Generally, re-stocking the allotment following severe drought will occur incrementally over several years.

VIII. FLEXIBILITY

It is imperative that flexibility be considered when following this allotment management plan. Adjustments to the grazing sequence may be necessary due to weather constraints (i.e. precipitation patterns favor or do not favor certain portions of the allotment), or management activities in an allotment or pasture (P/J treatments, prescribed burning, etc.).

There may also be a need to vary livestock numbers to meet objectives. Drought may force the reduction of livestock numbers (refer to Kaibab National Forest Drought Policy) while on the other hand additional numbers above term permit may be appropriate in certain situations.

**GRAZING SYSTEM
PASTURE PLAN**

ALLOTMENT: SPITZ HILL

DATE PREPARED: 02/02/2006

YEAR	PASTURE	MAY	JUNE	JULY	AUGUST	SEPT.	OCT.
2000	Spring Valley		■	■			
	Sawmill			■	■		
	Spitz Hill				■	■	
	Randall					■	
	Curry						■
	Shipping						■
2001	Spring Valley					■	■
	Sawmill		■	■			
	Spitz Hill			■	■		
	Randall				■	■	
	Curry					■	■
	Shipping						■
2002	Spring Valley				■	■	
	Sawmill					■	■
	Spitz Hill		■	■			■
	Randall			■			
	Curry				■	■	
	Shipping						■
2003	Spring Valley				■	■	
	Sawmill				■	■	
	Spitz Hill					■	■
	Randall		■				■
	Curry			■	■		
	Shipping						■
2004	Spring Valley			■	■		
	Sawmill				■	■	
	Spitz Hill					■	■
	Randall						■
	Curry		■	■			
	Shipping						■
2005	Spring Valley		■	■			
	Sawmill			■	■		
	Spitz Hill				■	■	
	Randall					■	
	Curry						■
	Shipping						■

IMPROVEMENT INVENTORY and MAINTENANCE RESPONSIBILITY

SPITZ HILL ALLOTMENT IMPROVEMENTS BY NAME, IMPROVEMENT NUMBER, UNITS IN PLACE,
AND MAINTENANCE RESPONSIBILITY.

02/09/2006

<u>IMPROVEMENT NAME</u>	<u>IMPROV. NUMBER</u>	<u>UNITS IN PLACE</u>	<u>MAINTENANCE RESPONSIBILITY</u>
GOVT MTN-SPITZ FEN, ABF	002022	1.3	GOVT MTN PERM
ELK SPR-SPITZ FEN, ABF	002062	1.5	SPITZ HILL PERM
SITG-SPITZ FEN, ABF	002071A	2.8	SPITZ HILL PERM - 2.8 MI BEGINNING ¼ COR SECS 8 & 17 T22N R4E, NORTH TO SW ¼ SEC 33 T23N R4E
OLD 66 ROW FENCE	002131	4.1	SPITZ HILL PERM
SPITZ-GOVT PR FEN, ABF	002132	1.75	SPITZ HILL PERM
SAWMILL/SPR VALLEY PR FEN	002134	1.0	SPITZ HILL PERM
SAWMILL PAST FENCE	002135	0.8	SPITZ HILL PERM
SHOOT 'M UP DICK TANK	002136	1.0	SPITZ HILL PERM
LITTLE SPRG WTR DEV	002138	1.0	SPITZ HILL PERM
SAWMILL TANK	002139	1.0	SPITZ HILL PERM
N.E. TANK	002141	1.0	SPITZ HILL PERM
T.O. TANK	002202	1.0	SPITZ HILL PERM
CURRY HOLDING FENCE	002223	0.5	SPITZ HILL PERM
SPITZ TANK	002230	1.0	SPITZ HILL PERM
SHIPPING PASTURE FENCE	002236	1.5	SPITZ HILL PERM
ROCKY TANK	002237	1.0	SPITZ HILL PERM
HAUSMAN SPRING	002238	1.0	SPITZ HILL PERM
N.E.SPRING	002239	1.0	SPITZ HILL PERM
SAWMILL SPRG. PIPELINE	002240	0.3	SPITZ HILL PERM
SAWMILL SPRING	002242	1.0	SPITZ HILL PERM
SPITZ HILL TANK	002243	1.0	SPITZ HILL PERM
SPITZ DRIFT FENCE	002251	0.2	SPITZ HILL PERM
GOVT. HILL CDR DRIVE FEN	002252	2.0	SPITZ HILL PERM
PIPELINE TANKS	002256	1.0	SPITZ HILL PERM
JACK TANK	002266	1.0	SPITZ HILL PERM
BELLE TANK	002270	1.0	SPITZ HILL PERM
SECTION 4 TANK	002271	1.0	SPITZ HILL PERM
SPITZ HILL/SAWMILL FENCE	002272	3.0	SPITZ HILL PERM
N.E. TANK WATERLOT	002326	0.2	SPITZ HILL PERM
SPITZ TANK WATERLOT	002327	0.2	SPITZ HILL PERM
SECTION LINE TANK	002386	1.0	SPITZ HILL PERM
JERRY'S TANK	002432	1.0	SPITZ HILL PERM
SAWMILL TANK RIPAR EXC	002435	1.0	SPITZ HILL PERM (LIGHT MAINT)
SAWMILL SPR RIPAR EXC	002436	1.0	SPITZ HILL PERM (LIGHT MAINT)
MAINE SCHOOL/FR 141 FENCE	002437	1.6	SPITZ HILL PERM
CURRY ROADSIDE TANK	002461	1.0	SPITZ HILL PERM
SPITZ HILL CORRAL	002462	1.0	SPITZ HILL PERM