

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

Allotment Management Plan

Six Bar Allotment



Cave Creek Ranger District

Tonto National Forest

R3

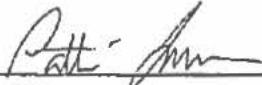
# SIX BAR ALLOTMENT MANAGEMENT PLAN

Cave Creek Ranger District


Tonto National Forest

Region 3

Prepared by:

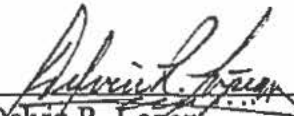
  
\_\_\_\_\_  
Patti Fenner  
District Range/Wildlife/Watershed Staff

12-14-95  
Date

  
\_\_\_\_\_  
Joe Lockett  
Lockett Ranches, Inc.

12-14-95  
Date

Approved by:

  
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Delvin R. Lopez  
District Ranger

12/18/95  
Date

## 1.0 Allotment Description and Background

The Six Bar Allotment encompasses 39,648 acres. It is located in Yavapai County, approximately 22 miles north of the town of Cave Creek, between Bloody Basin and Interstate 17. The allotment is administered by the Cave Creek Ranger District. It is situated within two watersheds: Tangle Creek, which drains into Horseshoe Reservoir; and Squaw Creek, which drains in to the Agua Fria River. It is also situated within two Ecosystem Management Areas: Bloody Basin and Squaw Creek.

Vegetation on the Six Bar Allotment is predominantly a juniper-associated grassland. Steep slopes are covered by chaparral, and major drainages are composed of an ash/sycamore riparian vegetation type. Species diversity on the uplands is high. Shrub and half-shrub species in the chaparral community include the following: silktassel, sugar sumac, squawbush, turbinella oak, cliffrose, beargrass, buckthorn, mountain mahogany, ceanothus, Wright's buckwheat, catclaw acacia, mimosa, prickly pear, agave, and broom snakeweed. The juniper-grassland community is composed of red berry, Utah, and alligator juniper, many of the shrub species of the chaparral community, hedgehog cactus, agave, deergrass, bullgrass, cane beardgrass, curly mesquite, three-awns, bermuda grass, green sprangletop, sideoats, black and hairy gramas, tanglehead, sand dropseed, vine mesquite, Plains lovegrass, and June grass.

The riparian community includes the following species: Arizona sycamore, Fremont cottonwood, Arizona ash, alder, willow, walnut, red berry and alligator juniper, hackberry, mesquite, catclaw acacia, mimosa, Arizona grape, deergrass, and bermuda grass.

In general, upland vegetation condition appears healthy. There is a wide diversity of perennial grass species, including cool season growers. Riparian vegetation on the allotment is in poor to fair condition, depending on accessibility to livestock. Overgrazing has occurred in many of the riparian areas on the allotment, resulting in an invasion of catclaw acacia, mimosa, and other undesirable species along riparian drainages.

There are approximately 38.8 miles of fencing, 5.8 miles of stock trails, 15 spring developments, 7 corrals, 17 stock tanks, and 3 cabins existing on the allotment. Maintenance and reconstruction is needed on most of the stock tanks and spring developments, as well as on the corrals listed as maintenance responsibilities of the permittee. Many spring developments consist of dug-out holes adjacent to the spring source. Stock tanks have not been maintained in some years and many have lost much capacity from being silted in. Most of the fences on the allotment are in good condition, although some are old and in need of maintenance. During the winter, water is plentiful in the canyons and in stock tanks throughout the allotment. As the weather warms up, stock tanks begin to dry out and water flowing in the canyons disappears, leaving springs and potholes in the major drainages as the main source of water.

## 2.0 Desired Condition

Management of grazing, wildlife habitat, and recreation on the Six Bar Allotment will create a healthy and diverse landscape. Upland areas will present a good mix of early and warm season perennial grasses, and browse species important to both cattle and wildlife will be abundant and in vigorous condition. Riparian areas and adjacent terraces will recover from past heavy livestock concentrations, and invaders will begin to be replaced by plants more resistant to erosive powers of large stream flows. Springs will be developed and maintained to provide dependable water to both wildlife and livestock. Development of springs will include protection of associated riparian areas for wildlife and watershed benefit, and will prevent animals from trampling water sources. A fairly intensive grazing management program on the allotment will make this possible. It will also create an efficient operation among the permittee's other ranches on adjacent State lands and on the Coconino National Forest. Initial expenditure of Range Betterment and the permittee's funds is paying off in later years in the form of high quality watershed condition, abundant wildlife numbers, and an efficient livestock operation.

## 3.0 Management Objectives

3.1 Maintain or improve watershed condition on moderate slopes and historic livestock concentration areas.

3.2 Manage this area so that water, forage and cover needs of wildlife are met.

3.3 Manage range in a manner compatible with physiological needs of the plants, especially in sensitive riparian areas. Graze key perennial grass species no more than 50 percent in key areas; create vegetation structure in the riparian community to include at least 3 younger age-classes of riparian woody vegetation. Specific riparian objectives are listed below:

### Mud Spring:

#### Short-term:

Increase number of seedlings and saplings of cottonwood and willow.

Maintain or increase deergrass canopy of 48 percent.

Increase canopy of sedges, rushes and reeds to 1-2 percent.

#### Long-term:

Increase basal area and canopy of cottonwood, ash, sycamore and willow.

Increase canopy of sedges, rushes and reeds above 2 percent.

### Squaw Creek:

#### Short-term:

Increase number of seedlings and saplings of ash, walnut, sycamore, and cottonwood.

Increase canopy of deergrass to 5 percent.

#### Long-term:

Increase canopy of sedges, rushes and reeds above 2 percent.

Middle Fork of Squaw Creek:

Short-term:

Maintain sapling age class of willow and ash.

Maintain or increase deergrass canopy of 13 percent

Increase canopy of sedges, rushes and reeds from "Trace".

Long-term:

Build diversity of age classes for willow, ash, cottonwood, and sycamore.

Increase basal area of willow, ash, cottonwood, and sycamore as age classes mature.

Continue to increase canopy of sedges, rushes and reeds.

Jack's Gulch:

Short-term:

Maintain or increase deergrass canopy of 7 percent.

Increase canopy of sedges, rushes and reeds from "Trace".

Long-term:

Increase basal area of ash and sycamore. Build age-class structure for these 2 tree species.

Continue to increase canopy of sedges, rushes and reeds.

For all riparian areas, the primary objective is to protect seedling of riparian trees from overgrazing once they become established. Germination and establishment of seedlings may not occur every year. Most riparian tree species require early spring overbank, depositional flood events to establish seedlings. In non-flood years, seedlings may not become established. Additionally, extreme flood events act to remove older age classes of riparian trees while setting the stage for excellent seedling establishment. Attainment of objectives for each drainage is dependent not only upon proper range management, but precipitation adequate to create conditions conducive to riparian tree reproduction.

3.4 Manage for diversity of browse and perennial grass species.

3.5 Provide for an efficient operation among the permittee's three ranches.

3.6 Provide for cost-efficient use of this rangeland. Cost-efficient for both the permittee and the Forest Service in both initial implementation and subsequent monitoring and management.

3.7 Currently conflicts between recreational users and permitted livestock management on the allotment are not an issue. This objective is to retain a low level of grazing impact on the recreating public.

#### 4.0 Ranch and Livestock Operation

The allotment will continue to be run as a seasonal operation until range improvements are constructed to support yearlong use. The Environmental Assessment for livestock management on the allotment approved a change in class, number and season of cattle, from 700 yearlings November 15 - June 15, to approximately 200 head of adult cattle year-round. This change to yearlong use will allow the permittee to keep a breeding herd on the National Forest that provides a calf crop for the State-lease lands to the west. As calves are born and weaned, they will be

moved to State lands. Since there will be no provision for yearlong cattle on the allotment, calves will be removed by the time they turn 6 months old.

The permittee has elected to take another year of Personal Convenience Non-Use. He is anticipating that improvements necessary for yearlong use will be constructed by the summer of 1997. If this is not the case, he will take another year of non-use.

#### **4.1 Animal Husbandry**

Time of year that bulls will be turned out: Bulls will be run with the cows year-round.

Time of year calving will occur: Calving will occur throughout the year. This is desirable for the permittee in order to provide a steady source of calves.

Branding, tagging: Approximately 60 percent of the calves will be branded in June; the other 40 percent in December. Time of year for branding may be slightly adjusted year to year in order to conduct this operation in a pasture with the proper facilities. The first year calves will be branded in Hutch in December and in June and in Wood Camp in June. The second year they will be branded in Cavness (Six Bar) in January and Hutch in June. Livestock will not be tagged unless accountability later becomes a problem.

Pasture moves: See schedule on page 8 for pasture moves. Cattle will be herded from pasture to pasture.

Marketing and shipping: Calves will be weaned at 350 - 425 pounds. Shipping will be from the facility at Wood Camp. Calves will be removed from the allotment in small numbers by trailer-load throughout the year, in conjunction with pasture moves.

#### **5.0 Grazing System and Schedule**

The allotment may be grazed on a seasonal basis by yearling cattle, or their equivalent in adult cattle from November 15 through June 15, until such time as improvements have been constructed to properly graze pastures according to a yearlong grazing schedule.

The Grazing Schedule that will be followed is on page 8.

#### **6.0 Range Development and Improvements**

Fence construction and extensive water development are critical to the effectiveness of this management plan. Presently, none of the areas to be grazed as pastures are fenced well enough to prevent cattle from drifting into other areas. Most existing water developments are in need of maintenance. Some spring developments will be upgraded with spring boxes, troughs and storage tanks.

## 7.0 Range Improvement Schedule

As stated in the Environmental Assessment, improvements must be completed prior to livestock remaining on the allotment through the summer. Also, range development will be phased in with improvements called for in Alternative F to be constructed prior to any others. Improvements are scheduled on a pasture by pasture basis. If summer pastures are not developed by the time livestock are scheduled to move into them, livestock will be removed from the National Forest. The first two years of pasture moves are listed below, with range developments required to use each pasture listed alongside the pasture name.

### Year 1:

<u>Months of use:</u>	<u>Pasture</u>	<u>Improvements Required</u>	<u>Responsibility</u>
Oct. - Dec.	Hutch Pasture	Clean 6 stock tanks	Permittee - routine maint.
		Develop/reconstruct 1 spring	FS - materials, Permittee - labor
		Construct fences B, D, and E	FS - materials, FS - 1/3 of labor Permittee - 2/3 of labor
Jan. - Mar.	Squaw Pasture	Develop 2 or 3 springs	Permittee - mat. + labor
		Reconstruct 2 springs	FS - materials, 1/2 of labor Permittee - 1/2 of labor
		Maintain Pasture fence	Permittee - routine maint.
		Repair breached stock tank	Permittee - routine maint.
Apr, May	Jack's/Cavness Pasture	Develop/reconstruct 3 springs	FS - materials Permittee - labor
		Construct fence C	FS - materials Permittee - labor
June, July	Wood Camp Pasture	Develop/reconstruct 1 spring	FS - materials + labor
		Construct fence F	FS - materials Permittee - labor
		Install cattle guard on FR269	FS - materials + labor
		Clean Hardscrabble Tank	Permittee - routine maint.
Aug, Sept.	Mud Springs Pasture	Develop/reconstruct 5 springs	FS - materials + 1/4 labor Permittee - 3/4 labor

### Year 2:

<u>Months of use:</u>	<u>Pasture</u>	<u>Improvements Required</u>	<u>Responsibility</u>
Oct. - Dec.	Hogan Pasture	Clean 4 stock tanks	Permittee - routine maint.
		Develop/reconstruct 1 spring	FS - materials Permittee - labor
Jan. - March	Jack's/Cavness	Improvements already completed in Year 1	

Year 2, continued:

<u>Months of use:</u>	<u>Pasture</u>	<u>Improvements Required</u>	<u>Responsibility</u>
Apr, May	Holmes Pasture	Clean 3 stock tanks Develop/reconstruct 9 springs	Permittee - routine maint. FS - materials Permittee - labor
June, July	Hutch Pasture	Improvements already completed in Year 1	
Aug, Sept.	Wood Camp Pasture	Improvements already completed in Year 1	

## 8.0 Range Improvement Maintenance

The attached list of range improvements will be maintained by the permittee to a functional standard throughout the life of the plan. An emphasis will be placed on restoring existing developments and/or installation of new water developments for each pasture. After water developments are in place, work will concentrate on construction of new pasture fences.

Maintenance responsibility for all new range developments will be assigned to the permittee upon completion of construction.

The use of heavy equipment such as crawler tractors must be approved in advance by the District Ranger.

Cleaning dirt stock tanks is considered a maintenance item and will require only advance notice via phone call. Any major work which significantly alters the structure, spillway or increases the original capacity of the tank is considered reconstruction and will require a joint onsite inspection to determine the extent of work to be done.

## 9.0 General Management Considerations

### 9.1 Actual Use Records

The permittee will keep accurate accounting of cattle numbers entering each unit and the length of time the unit was grazed. These records will be presented to the District upon request.

### 9.2 Annual Operating Instructions

Annual Operating Instructions will be in the form of a letter written annually from the District Ranger. These instructions will serve as a working understanding with the permittee for carrying out actions described in this management plan. The annual plan will outline items of permittee responsibility such as salting, range improvement construction and maintenance, and livestock movement between units. It will also describe actions the Forest Service will take for the year in



implementing the management decision.

## **10.0 Follow-up Action and Monitoring**

### **10.1 Production/Utilization Studies**

The Forest Service will conduct production/utilization studies on one summer-use pasture each year for 2 years following complete implementation of the Allotment Management Plan.

### **10.2 Range Inspections**

The Forest Service will conduct range inspections before and after development of springs and construction of range fences.

### **10.3 Riparian Monitoring**

Riparian transects that were established in Mud Springs, Jack's Gulch, Squaw Creek and Middle Fork will be monitored every 5 years from the date that livestock begin to graze the allotment again. Riparian photo points will be retaken annually in late summer.

### **10.4 Arizona Agave**

The Forest Service will monitor known agave for flowering, occurrence of offsets, and mortality the year that the Squaw Pasture is used from January to March. Range inspections in the Hogan/Jack's Pasture will emphasize locating any previously unknown agave plants and monitoring any effects of livestock grazing.

### **10.5 Predation**

The permittee will notify the District of any mountain lion he or his employees take with tags or as authorized by the stock-killer law. The District will periodically check with Arizona Game & Fish Department for their records of lion taken in the area. The permittee will also maintain records of lion kills of livestock on the allotment, in order to provide this information to the District during regular permit validation meetings.

### **10.6 Upland Transects**

The District will re-read selected upland Parker 3-Step Clusters 2 years after full implementation of this management plan.

USDA - FOREST SERVICE  GRAZING SYSTEM MANAGEMENT UNIT ALLOCATIONS	REGION 3	FOREST Tonto
	DISTRICT Cave Creek	DATE PREPARED 12-95
ALLOTMENT Six Bar	PERMITTEE Lockett Ranches, Inc.	

LEGEND:

<input checked="" type="checkbox"/>	Grazed	<input type="checkbox"/>	
<input type="checkbox"/>	Rested	<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	

MANAGEMENT UNIT	MONTH												NOTES
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
First Year -													
Mud Springs													
Holmes													
Hogan													
Hutch									X	X	X	X	
Squaw													
Jack's/Cavness													
Wood Camp													
Second Year -													
Mud Springs							X	X	X				
Holmes													
Hogan									X	X	X	X	
Hutch													
Squaw	X	X	X	X	X								
Jack's/Cavness				X	X	X	X						
Wood Camp						X	X	X	X				
Third Year - 19													
Mud Springs													
Holmes				X	X	X	X						
Hogan													
Hutch						X	X	X	X				
Squaw									X	X	X	X	
Jack's/Cavness	X	X	X	X	X								
Wood Camp							X	X	X	X			
Fourth Year - 19													
Mud Springs				X	X	X	X						
Holmes						X	X	X	X				
Hogan	X	X	X	X	X								
Hutch									X	X	X	X	
Squaw													
Jack's/Cavness							X	X	X	X			
Wood Camp													
Fifth Year - 19													

REMARKS: