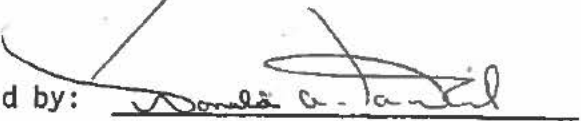


SUPERSTITION ALLOTMENT
MANAGEMENT PLAN

Mesa Ranger District
Tonto National Forest

Prepared by:  Date: 5-21-85

Submitted by:  Date: 5/21/85

Agreed to by: _____ Date: _____

Approved by:  Date: 8/22/85

I. BASIC DESCRIPTION

A. Management Units

The Superstition Allotment will be managed in a three-pasture, rest-rotation grazing system (see enclosed map for pasture boundaries). The pastures include Apache, Boulder, and LaBarge.

The Apache pasture includes 21,700 acres along the front range, in the Hackberry Spring area and the Mesquite Flat area. The primary forage in this pasture is jojoba with curlymesquite, Ephedra, ratany, and Menodora also providing significant amounts of forage. Most of this pasture has been lightly used or not used at all by livestock during recent years. The only heavily used areas occur along the First Water road and in the area of Mesquite Flat.

The Boulder pasture includes 21,400 acres in the Boulder, First Water, and LaBarge drainages. The primary forage in this pasture is jojoba but large areas of curlymesquite are present on the basalt mesas located within the pasture. Other forage plants include Ephedra, ratany, Menodora, mountain-mahogany, hollyleaf buckthorn, Desert Ceanothus, and sideoats grama. Most drainage bottoms and areas adjacent to developed water within this pasture have received heavy livestock use in the past and the vegetation resource is in poor or very poor condition.

The LaBarge pasture includes 14,700 acres in the Peters Canyon, LaBarge, Barks Canyon, Peralta Canyon, and Whitlow Canyon drainages. The primary forage is jojoba with Ephedra, curlymesquite, Menodora, ratany, sideoats grama, mountain-mahogany, Desert Ceanothus, and hollyleaf buckthorn also present within the pasture. This pasture like the Boulder pasture has been heavily used in the past with use concentrated in drainages and adjacent to developed waters. This pasture has a smaller percentage of "no allowable capacity range" than the Apache and Boulder pastures resulting in the smaller pasture size.

Annual forbs and grasses are important forage in all three pastures, but the total production of these annual plants varies considerably from one year to the next. For this reason, no capacity has been assigned to annual production.

Production-utilization studies, pace transects, and permanent trend transects are included in the Environmental Assessment that discusses the alternatives for management of this allotment. These studies detail livestock use patterns and the vegetation and soil resource condition and trend for the entire allotment.

B. Type of Operation

The permittee will utilize a cow-calf operation with calves carried over and sold the following spring as yearlings. The adult cattle will remain on the allotment yearlong with spring and fall roundups to brand calves, cull and replace breeding stock, and to ship yearlings.

C. Pasture Moves

Pasture moves will be in conjunction with spring and fall roundups. Some pasture moves will require driving the cattle several miles or moving them by truck.

D. Tagging

No program of eartagging will be incorporated into the implementation of this management system.

E. Livestock Distribution

A concentrated effort by the permittee to move livestock will be necessary to prevent overuse of key areas. Seasonal variations in water availability require this movement. Salt will be placed as far from water sources as possible and salt grounds will be changed each successive time a pasture is utilized. No permanent salting locations will be allowed and salt will not be placed along hiking trails, or in heavily used camping areas.

F. Permitted Numbers

The permit for this allotment will be 150 cattle (cows and bulls) yearlong plus 94 head of natural increase from January 1 until May 31 each year. Any horses that are grazed will need to be included in the 150 head total.

II. GOALS AND OBJECTIVES OF MANAGEMENT

A. Goals

1. Manage suitable rangeland at Level B (Management controls livestock numbers so that livestock use is within present grazing capacity. Improvements are minimal and constructed only to the extent needed to protect and maintain the range resource).

2. Reduce wilderness user-livestock conflicts.

3. Achieve at least 80% of the potential overstory crown coverage in riparian areas as identified on the Range Analysis Map.

4. Rehabilitate at least 80% of the potential shrub cover in riparian areas and other key areas by the use of grazing management.

5. Realize ecological and commodity ratings of high in key areas as measured by the Sonoran Desert Scorecard.

B. Objectives (0-4 years)

1. Complete range improvement maintenance, reconstruction, and construction as outlined in Part IV of this plan.

2. Implement the grazing management system in the spring of 1986.
3. Allow a maximum use in key areas of 60% of the current year's growth on the primary forage plant. The 60% figure refers to the number of twigs that have been utilized and not to the volume of forage, i.e., 6 twigs out of 10 have been utilized to some extent.

In key areas that are located within a riparian community, this utilization will not exceed 20% by volume of the current year's growth on any woody species including the primary forage.

Key areas and the primary forage plant by pasture include:

Apache Pasture - key areas: Mesquite Flat, Lower Tortilla Creek, Peters Canyon, and First Water Creek; primary forage: jojoba.

Boulder Pasture - key areas: Garden Valley, Cholla stock tank area, Second Water, Boulder Canyon, LaBarge Canyon, and Needle Canyon; primary forage: jojoba.

LaBarge Pasture - key areas: LaBarge Canyon, Peters stock tank area, Bluff Spring area, Whiskey Spring Canyon, and the Quarter Circle U area; primary forage: jojoba.

These key areas are outlined in the 1980-81 production-utilization study as areas that received utilization at greater than 65%.

4. Provide forage for 150 cattle yearlong plus their natural increase, 94 head from January 1 until May 31 each year.

III. MANAGEMENT SYSTEM

A one-herd, three-pasture, rest-rotation grazing management system will be used on the allotment. Pasture moves will coincide with spring and fall roundups. Advantages of this type of system include:

A. Cattle are in one pasture at a time saving work at spring and fall roundups as well as day-to-day care. Distribution efforts are concentrated on one-third of the allotment at any given time.

B. Forage plants have two growing seasons out of three when they are not used allowing recovery from livestock use. Forage plants present on this allotment are primarily warm season growers.

C. Livestock-recreational user conflicts are confined to one-third of the allotment at any particular time.

The primary disadvantage with this system is the dependency on proper livestock distribution. If proper distribution is not maintained, large numbers of livestock will be concentrated on a few key areas.

The management system will be initiated at the spring roundup in 1986. The stocking rate will be 150 cattle yearlong plus 94 head of natural increase from January 1 until May 31 each year.

Form 2200-18 and a map showing the management system components are included in the Appendix.

IV. RANGE IMPROVEMENTS

Range improvements scheduled for construction or reconstruction in conjunction with the management system are listed below. These improvements are also shown on the allotment map in the Appendix.

<u>Fiscal Year</u>	<u>Action</u>
1986	Reconstruct three corrals: <ol style="list-style-type: none"> 1. Mesquite Flat corral, loading chute, and wing fence - 002036. Forest Service - materials, \$1,000; permittee - labor, \$500. 2. Bluff Springs corral and wing fence - 002033, 002041. Forest Service - materials, \$500; permittee - labor, \$750. 3. White Rock corral - 002358. Forest Service - materials, \$500; permittee - labor, \$750. <p>Reconstruct Carney Spring - 002042 - the point of use will not be changed. Forest Service - materials, \$500; permittee - labor, \$1,000.</p>
1986-1987	Reconstruct the West Boundary fence, 4 miles - 002028. Forest Service - materials and labor, \$18,000.
1987	Construct a pasture fence, SE $\frac{1}{2}$, section 29, T2N, R9E - this construction will include $\frac{1}{2}$ mile of four-strand fence connecting fence 00728 with the First Water pasture fence forming a pasture boundary. The Forest Service will provide materials (\$1,000) and the permittee will provide the labor (\$1,000) necessary to complete this improvement.
	Construct a dugwell and waterlot, SW $\frac{1}{2}$, section 31, T2N, R9E - this water source is presently on the Goldfield Allotment, which has no active grazing permit. It consists of a water hole at the bottom of an open pit excavated during mining operations. These mining claims are no longer active and have been withdrawn. Ground water rights for this water hole have been applied for with the State of Arizona. This water hole will be cleaned and fenced in a water lot. To allow access from the Superstition Allotment, the boundary fence will be shifted approximately $\frac{1}{2}$ mile west and tied into the water lot. Total construction needs will be approximately $\frac{3}{4}$ mile of four-strand fence. The Forest Service will provide materials (\$1,500) and the permittee will provide the labor (\$1,500) necessary to complete this improvement.

1988 Reconstruct White Rock pasture fence, $\frac{1}{4}$ mile - 002359. Forest Service - materials, \$500; permittee - labor, \$1,000.

Reconstruct Charlebois spring - 002051 - the point of use will not be changed. Forest Service - materials, \$250; permittee - labor, \$1,500.

Construct a fence at Charlebois spring - this construction will include approximately $\frac{1}{4}$ mile of fence to prevent livestock access to the spring source. The Forest Service will provide materials (\$500) and the permittee will provide the labor (\$1,000) necessary for completion of this improvement.

1989 Construct a fence (3 miles) adjacent to the Apache Trail (SR88) from Boulder Creek to approximately $\frac{1}{4}$ mile east of Tortilla Flat. A cattleguard will be installed on SR88. This fence will exclude cattle from the Canyon Lake Recreation Area. Forest Service - materials, \$16,000; permittee - labor, \$7,500.

The following improvements are not functioning and will require heavy maintenance as shown:

1. Jojoba stock tank - 002039 - prior to the second pasture move.
2. Bluff spring - 002041 - prior to implementation.
3. Ramon spring - 002044 - prior to implementation.
4. Whiskey spring - 002357 - prior to implementation.

V. MAINTENANCE OF IMPROVEMENTS

All maintenance of existing and planned improvements will be the responsibility of the permittee. New improvements will be added to the permittee's improvement list as they are completed (form CPO 2200-5).

VI. FOLLOWUP ACTION

Following implementation of the management system, annual range inspections will be conducted with the permittee. These inspections will be used to monitor improvement maintenance, reconstruction, and construction; monitor the percent utilization on forage plants in key areas; document the overall condition of the range resource; and to carefully monitor livestock distribution.

Following the completion of two full rotations (calendar year 1992 assuming the plan is implemented in the spring of calendar year 1986) a series of three production-utilization studies, one in each pasture, will be initiated to evaluate the capacity and stocking rate of the allotment.

Pasture moves and specific instructions will be included in annual permittee instructions and given to the permittee prior to the spring roundup and pasture move.

VII. APPENDIX

- A. Grazing system management unit allocations - form 12-2200-18.
- B. Allotment map.

USDA-FOREST SERVICE

GRAZING SYSTEM
MANAGEMENT UNIT ALLOCATIONS

REGION

3

FOREST

TONTO - 12

DISTRICT

MESA

DATE PREPARED

APRIL 30, 1985

LOTMENT

SUPERSTITION

PERMITTEE

LEGEND:

- APACHE PASTURE
- BOULDER PASTURE
- LABARGE PASTURE

MANAGEMENT UNIT	MONTH												NOTES	
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		
First Year - 19₈₆														
BOULDER PASTURE														
APACHE PASTURE														
LABARGE PASTURE														
Second Year - 19₈₇														
BOULDER PASTURE														
APACHE PASTURE														
LABARGE PASTURE														
Third Year - 19₈₈₋₉₁														
BOULDER PASTURE														
APACHE PASTURE														
LABARGE PASTURE														
Fourth Year - 19₈₉₋₉₂														
BOULDER PASTURE														
APACHE PASTURE														PU STUDY - MAY 1992
LABARGE PASTURE														PU STUDY - NOV. 1992
Fifth Year - 19₉₀₋₉₃														
BOULDER PASTURE														PU STUDY - MAY 1993
APACHE PASTURE														
LABARGE PASTURE														

REMARKS:

**SUPERSTITION
ALLOTMENT ANALYSIS MAP
MESA RANGER DISTRICT
TONTO NATIONAL FOREST**
Scale 2" = 1 Mile

Drawn by JMR Date 1282 Field Work by JMR Date 1981

LEGEND

<ul style="list-style-type: none"> Boundary Line Code Improvement Construction Improvement Reconstruction Improvement Maintenance Wilderness Boundary Closed to Grazing 	<ul style="list-style-type: none"> Water Features Vegetation Soils Topography Infrastructure Other
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PACED TRANSECTS

P 1 16 Ande	Qar	11ch	127/77
P 2 16 Stich	Erfa	011a	87/77
P 3 16 Ande	Stch	0011	104/77
P 4 16 Ande	Ap1a-2	Stch	114/107
P 5 16 Ande	Lefta	0208	107/77
P 6 16 Ande	0208	111a	107/77
P 7 16 Ap1a-2	0208	111a	107/77
P 8 16 Quta	Reax1	Stch	117/77
P 9 16 Car	Ap1a-2	Erfa	114/77
P 10 16 Car	0208	111a	107/77
P 11 16 Ap1a-2	0208	111a	107/77
P 12 16 Stich	0208	111a	107/77
P 13 16 Car	0208	111a	107/77
P 14 16 Ap1a-2	0208	111a	107/77
P 15 16 Stich	0208	111a	107/77
P 16 16 Stich	0208	111a	107/77
P 17 16 Stich	0208	111a	107/77
P 18 16 Stich	0208	111a	107/77
P 19 16 Stich	0208	111a	107/77
P 20 16 Stich	0208	111a	107/77
P 21 16 Stich	0208	111a	107/77
P 22 16 Stich	0208	111a	107/77

CLUSTERS

C 1 16 Stich	0208	111a	107/77
C 2 16 Stich	0208	111a	107/77
C 3 16 Stich	0208	111a	107/77
C 4 16 Stich	0208	111a	107/77

**SUPERSTITION ALLOTMENT
MANAGEMENT PLAN**

MAP LEGEND

Feature Boundaries	—————
Improvement Construction	—————
Improvement Reconstruction	—————
Improvement Maintenance	—————
Wilderness Boundary	—————
Closed to Grazing	—————

