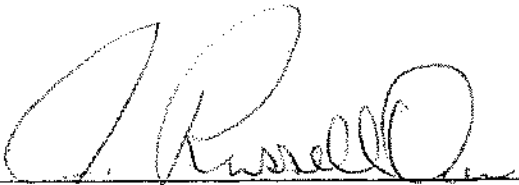


U.S. Department of Agriculture
Forest Service

Tonto National Forest
Mesa Ranger District

Environmental Assessment
Management of the Reavis and Tortilla
Grazing Allotments

Prepared by:



Date:

10-24-85

Reviewed by:



Date:

10-25-85

I. INTRODUCTION AND NEED FOR THE PROPOSED ACTION

The Reavis and Tortilla Allotments are presently being utilized with seasonal yearling grazing operations. The grazing season for both allotments is November 1 until May 31 with 1,000 yearlings (300-450 lbs. entry weight) permitted on the Reavis Allotment and 800 yearlings permitted on the Tortilla Allotment. In order to adequately evaluate the stocking rate, season of use, and type of livestock on the allotments, a management plan needs to be developed that outlines specific goals and objectives for grazing management.

This report will discuss the alternatives available for management of the allotments. Issues and concerns that need to be addressed during this discussion include:

- A. Proper management of the permitted livestock on the allotments.
- B. Protection of Wilderness values.
- C. Maintenance of a viable grazing operation on the allotments.
- D. Protection and enhancement of key riparian habitat within the allotments.

Range analysis has been completed on both allotments. This analysis which details condition and trend of the vegetation resource, percentage of full capacity range, etc., is included in the Appendix.

II. AFFECTED ENVIRONMENT

A. Location, Size, Ownership, and Status

Tortilla Allotment

The Tortilla Allotment includes 27,445 acres, all of which is Forest Service administered land. Of this total, 21,535 acres are classified as full capacity range. The Tortilla Allotment is bordered on the west by the Superstition Allotment; on the north and east by the Reavis Allotment; and on the south by the Millsite Allotment.

Approximately 90% of the allotment area is within the Superstition Wilderness.

Reavis Allotment

The Reavis Allotment includes 38,567 acres of which 20 acres are private land. The remaining 38,547 acres are Forest Service administered land. Of the Forest Service administered land, 33,152 acres are classified as full capacity range. The Reavis Allotment is bordered on the west by the Tortilla Allotment; on the south by the Millsite Allotment; on the east by the Brushiest, Campaign, and Bar V Bar Allotments; and on the north by the Roosevelt and Sunflower Allotments and an area adjacent to Apache Lake that is closed to grazing.

Approximately 75 percent of the allotment area is within the Superstition Wilderness.

B. Geology and Topography

All of the Tortilla Allotment and approximately one-half of the Reavis Allotment are included in the Superstition volcanic complex. The complex consists of undifferentiated volcanic flows, tuffs, and breccias including some plugs and dikes. Topography associated with the volcanic complex includes an extremely rugged landscape with many vertical bluffs and talus slopes. The eastern half of the Reavis Allotment consists of granitic intrusive rocks with some diabase dikes and sills. The topography in this area is characterized by steep, highly dissected slopes with easily eroded soils.

Elevations on the allotments range from 1,610 feet above sea level at Canyon Lake to 6,266 feet above sea level at the top of Mound Mountain.

C. Wildlife

Wildlife populations on the two allotments are as varied and complex as the habitat. A wildlife report that discusses this habitat in further detail is included in the range analysis (see Appendix).

D. Vegetation

The following table categorizes vegetation by acres within a biotic community for the two allotments. For further information on these communities, detailed descriptions are included in the Biotic Communities of the American Southwest - United States and Mexico, David E. Brown, Editor, 1982.

Acres

<u>Reavis</u>	<u>Tortilla</u>	<u>Biotic Community</u>
950		Warm temperate wetlands - Interior Riparian Deciduous forest and woodlands.
530	456	Tropical - subtropical wetlands - Sonoran Riparian Deciduous forests and woodlands.
7,419	12,593	Warm temperate grasslands - semi-desert grasslands.
11,102	2,572	Tropical - subtropical desertlands - Sonoran Desert-scrub, Arizona Upland Subdivision.
13,141	5,814	Warm temperate Scrublands - Interior Chaparral.

E. Climate

The climate in the area of the Reavis and Tortilla Allotments is typical of warm-temperate areas with the exception of the Sonoran desert areas which are hotter and dryer. Winters are mild and freezing temperatures generally occur less than 100 days during the year. Summers are hot with many days over 100° F. Relative humidities are usually low except during storm periods. Winds are especially prevalent during the spring and fall. Precipitation is distinctly bimodal with significant but irregular amounts of precipitation falling during the summer monsoon. Summer rainfall occurs as high intensity thunderstorms as opposed to winter rainfall which is generally associated with Pacific frontal storms. Annual precipitation ranges from 10-30 inches.

F. Recreation

The Reavis and Tortilla Allotments include a large percentage of Wilderness (Reavis 75%, Tortilla 90%). Within this part of the Superstition Wilderness (known as the "east end" for management purposes) several popular trailheads and many miles of system trail are located. Recreation use, although not as concentrated as in the west end, can be heavy during the cooler part of the year. This use is expected to increase as the population of the Phoenix metropolitan area continues to grow.

A detailed list of management prescriptions for this area is included in the proposed Tonto National Forest Plan. The east end of the Superstition Wilderness has been designated management area 3B. The management emphasis for the area will be to "manage for wilderness values while providing livestock grazing and recreation opportunities that are compatible with maintaining wilderness values, and protecting resources".

G. Livestock

In the fall of 1966, grazing on the Reavis and Tortilla Allotments was converted from cattle yearlong to seasonal yearlings. Use by livestock since that time has been sporadic with the allotments being in total nonuse six out of the last eight years.

Presently the allotments are in nonuse pending resolution of legal problems involving the base property.

During the years when yearlings have been grazed, considerable problems with drift (off the allotments) have been encountered. There has also been a problem with gathering all the livestock and a small resident herd of wild steers has become established.

Structural range improvement maintenance on the allotments has been almost ignored and most of the improvements no longer function or are in a state of disrepair.

III. ALTERNATIVES CONSIDERED

- A. No Action - use by seasonal yearlings would continue. A plan to guide and evaluate livestock use would not be developed.
- B. Convert the permit from seasonal yearlings to yearlong cow/calf. A management plan would be developed and implemented for the yearlong cow/calf operation.
- C. Develop and implement a management plan for the present seasonal yearling permit.

IV. AFFECTS OF IMPLEMENTATION

- A. No Action - seasonal yearling use of the allotments would continue with no guidance from a grazing management plan. Some of the problems that would remain unresolved include:
 - 1. Lack of maintenance on structural range improvements.
 - 2. Need for removal of nonconforming structural range improvements.
 - 3. Lack of proper livestock distribution.
 - 4. Improper salting procedures.
 - 5. No schedule for evaluating current stocking rates and seasons of use to determine if they are appropriate.

This alternative was eliminated from further consideration because the management prescriptions for area 3B state that livestock grazing will be managed to maintain wilderness values and protect resources. This alternative would do neither.

- B. Convert the seasonal yearling permit on the allotments to a year-long cow/calf permit.

This alternative would require considerable structural improvement development to properly manage the livestock.

Approximately 90 percent of the full capacity range on both allotments is within management area 3B (east end of the Superstition Wilderness). Rangeland within this area is to be managed 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 in the presence of grazing".

Changing the class of livestock with the resultant need for extensive improvement development is not compatible with an area that is to be managed at Level B. For this reason, Alternative B was dropped from further consideration.

- C. Develop and implement a management plan for the present seasonal yearling permit.

This alternative would retain the present class of livestock, permitted numbers, and season of use. A management plan would be developed that addresses the problems mentioned with Alternative A. This alternative includes no range improvement construction or reconstruction. Initial implementation would emphasize the evaluation of "essentiality" for existing improvements, followed by maintenance or removal.

V. SELECTION OF THE PROPOSED ALTERNATIVE

Based on evaluation of the alternatives, C is the only viable alternative.

VI. MANAGEMENT REQUIREMENTS AND CONSTRAINTS

- A. Permitted numbers, season of use, and class of livestock would remain unchanged at this time.
- B. A management plan would be developed and implemented to guide and evaluate livestock use on the allotments.
- C. Grazing on the allotments would be managed at Level B as described in Appendix D of the proposed Tonto National Forest Plan. Because 90 percent of the full capacity range is within the Superstition Wilderness, it would not be practical to manage the remaining 10 percent at a different level.
- D. The management plan would address the specific management prescriptions for all riparian areas as outlined on page 41 of the proposed Tonto National Forest Plan.

VII. CONSULTATION WITH OTHERS

- A. Arizona Game and Fish Department - (see attached letter)
- B. Grazing Permittee - the present permittee has not been involved with the livestock operation and declined input into the management planning process.

VIII. APPENDICES

- A. Allotment maps
- B. Allotment Analysis
- C. Letter from Arizona Game and Fish

BRUCE BABBITT, Governor

Commissioners:
CURTIS A. JENNINGS, Scottsdale, Chairman
W. LINN MONTGOMERY, Flagstaff
FRED S. BAKER, Elgin
LARRY D. ADAMS, Bullhead City
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OCT 22 1985

October 9, 1985

Don VanDriel
District Ranger, Mesa District
United States Forest Service
26 N. McDonald
Mesa, AZ. 85201

*Revis
Lets discuss*



RE: Reevis & Tortilla Allotment
Management Plan

Dear Mr. VanDriel:

Thank you for the opportunity to review and comment on this document. The following comments are provided for your consideration.

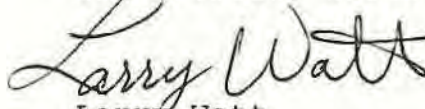
1. There is a split deer hunting season on the Reevis and Tortilla Allotments. The first season is for 4 days during the latter part of October - usually the last weekend. The second season is for 11 days and usually includes the first two weekends in November. The Tortilla Headquarters area receives a great amount of use by deer hunters during both hunts. That is also one of the locations where cattle are brought in by the local rancher. Out of consideration for deer hunters during the second hunt, and in order to avoid likely conflicts between the rancher and hunters we request that cattle not be stocked until November 15, if possible. We have no objection to allowing cattle to remain on the range an additional 2 weeks to compensate for a later introduction.
2. If yearlings are to be distributed throughout the usable portions of the allotment by means of salting, then we request that salt blocks be placed at least $\frac{1}{4}$ mile from water sources, whether they be developments, natural springs, or riparian areas. We also request that salt blocks be placed at least $\frac{1}{4}$ mile from major trails to avoid conflicts with recreationists.
3. Since there is now an established herd of feral livestock on the Tortilla Allotment, we feel that an appropriate adjustment be made to reduce the total number of yearlings

stocked on that allotment. This reduction should be based on the estimated weight of the wild steers versus the necessary number of yearlings to equal that weight. Likewise we request that some provision be made to reduce stocking rates to compensate for any livestock left on the range after the prescribed stocking dates, since this has been a chronic problem in the past and remains a problem even to the present.

4. We request that water improvements be maintained in such a manner that they can be utilized by wildlife on a year-round basis.
5. We request that no livestock be grazed on top of Horse Mesa in order to avoid conflicts or competition with bighorn sheep. The range in that area is limited capacity and the presence of cattle on Horse Mesa could prove detrimental to bighorn sheep, especially during dry seasons when water on top of the Mesa is a critical factor.

Sincerely,

Bud Bristow, Director



Larry Watt
Acting Habitat Specialist

LW:DM:rmm

Prepared by: Dana McGehee, Wildlife Manager

LW01/05

Russ,

We support alternative C and would like to suggest the above recommendations be included in the plan. Thanks again for the opportunity to review and comment on this A.M.P.

Sue Morgan