ALLOTMENT MANAGEMENT PLAN

FOR THE

BLACKTAIL ALLOTMENT

SIERRA VISTA RANGER DISTRICT

CORONADO NATIONAL FOREST

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INTRODUCTION

The Blacktail Allotment is permitted to 4Y Sundown, LLC, and managed by James Hathaway. The current permittee has grazed the Blacktail Allotment for several decades. In 2006, an environmental analysis (EA) was completed. The EA and Decision Notice (DN) were the guiding documents for this allotment management plan (AMP).

The Blacktail Allotment is located approximately 20 miles southeast of Patagonia, Arizona, on the west side of the Huachuca Mountains. Elevations range from 5100 –5500 feet. Most of the Blacktail Allotment is in the Natural Resources Conservation Service (NRCS) 16-20 inch precipitation zone and is represented by loamy upland ecological sites. Topography consists of several northeast-southwest ridges separated by Bodie, Blacktail, and Sunnyside Canyons and their slopes and benches. The allotment is bordered on the north and west by the Lone Mountain Allotment and on the east and south by the Campini Allotment.

The ranch consists of approximately 952 private acres and 3,215 Coronado National Forest acres for a total of 4077 acres, all of which are capable and suitable for grazing. Most of the private land is not fenced separately from the Forest. The ranch is managed as a cow-calf operation where a single-herd is moved through five main pastures (Menefee, Tom's, Sundown, Sunnyside and Campini) and two traps in a deferred rest rotation schedule. All pastures can be used at any time of the year, although Menefee Pasture is better suited for winter use than the others. Ecological condition data show marked improvements from the 1960's and stable to slight downward trends in recent years. Most of the uplands are in high-fair or good ecological condition.

New permits were issued in 2007 for up to 2059 Animal Unit Months (AUM), equivalent to 130 cow/calf pairs yearlong on the combined Forest (100 cow/calf pairs or 1584 AUM) and private land (30 cow/calf pairs or 475 AUM and 3 horses) permits. Numbers authorized in annual operating instructions (AOI) may fluctuate from year to year based on such variables as precipitation patterns and resulting forage production, changes in the grazing system, potential impacts of wildfire, and the permittee's performance in implementing proper grazing practices as indicated in the AMP and AOI.

GOALS & OBJECTIVES

The Coronado National Forest Land and Resource Management Plan (LRMP, page 10) contains the following goals for the range program on the Forest:

- To restore rangeland to at least moderately high ecological condition (70% to 75% of potential production, fair range condition) with stable soil and a static-to-upward trend.
- Produce livestock products consistent with other resources and uses.
- Eliminate grazing from areas not capable of supporting livestock without significant detriment to range or other resources.
- Balance permitted grazing use with grazing capacity.

- Provide habitat for wildlife populations consistent with the goals outlined in the Arizona Department of Game and Fish Comprehensive Plans and consistent with other resource values.
- Provide for ecosystem diversity by at least maintaining viable populations of all native and desirable nonnative wildlife, fish and plant species through improved habitat management.
- Improve the habitat of and the protection for local populations of Threatened and Endangered species to meet the goals of the Endangered Species Act of 1973.
- Provide a favorable flow of water in quantity and quality for off-forest users by improving or maintaining all watersheds to a satisfactory or higher level.
- Allow the use of available National Forest lands for appropriate public or private interests consistent with National Forest Policies.

The grazing permit and allotment management plan for the Blacktail Allotment support these goals by providing for the following specific objectives, which constitute the desired condition in the analysis area:

- Grazing activities contributing to impaired soil quality are corrected through improved distribution.
- Ecological condition as expressed by the number of acres in fair or better condition is maintained or improved.
- Range production and movement toward site potential for each soil/vegetation site is increased.
- All grazing improvements on the Blacktail allotment are in proper working order.
- Develop reliable upland waters to improve livestock distribution and pasture reliability.
- Provide for adequate rest periods in all pastures.
- Livestock use is balance with existing capacity.

The purpose of this AMP is to describe on-the-ground management practices which will achieve the above goals and objectives.

ALLOTMENT MANAGEMENT PLAN

This AMP is part of the terms and conditions of the Forest term grazing permit. The AMP incorporates an adaptive management strategy, whereby, if monitoring indicates that desired conditions are not being achieved, the Forest Service and permittee will cooperatively modify management practices. Modifications may include the number of livestock authorized in the AOI, dates for grazing, the class of animal, pasture rotations, and grazing systems. Any changes will not exceed the limits for timing, intensity, duration and frequency analyzed in the EA.

GRAZING STRATEGY. The permittee and the Sierra Vista Ranger District Range Staff concur in continuing the current deferred rest rotation system in which a single herd is moved through the primary pastures guided by utilization levels in key areas (45%) and forage and water conditions. The herd will continue to use Menefee Pasture in the winter months and rotate through the remaining pastures in the warmer months. Figure 1 illustrates how this strategy would be implemented.

The rotation guide is to be used as part of an adaptive management strategy that responds to changing conditions. The goal of the rotation is to provide opportunities for perennial forage grasses in both the riparian corridors and the uplands to grow and reproduce when summer precipitation is available. The number of cattle, season of use and pasture rotations will vary from year to year depending on forage and water availability, resource conditions and management objectives. Forage utilization will be managed at a level corresponding to light to moderate intensity (maximum of 45% annual utilization in key areas) in order to provide for grazed plant recovery, increased herbage production and retention of herbaceous litter to protect soils.

Records of livestock numbers, movement dates, shipping records, and rainfall dates and amounts will be kept by the permittee and will be provided to the USFS annually.

MITIGATION. To mitigate resource impacts, the following measures will be implemented. These measures have been used on previous projects and are considered effective at reducing environmental impacts. They are consistent with applicable Forest Plan standards and guidelines, Best Management Practices and the terms and conditions and conservation measures of existing biological opinions. Implementation of the mitigation measures, in combination with project design criteria, should preclude the occurrence of potentially significant environmental impacts.

Soil, Water and Vegetation. The objective is to mitigate effects of livestock grazing management and to assure that management is responsive to changing resource conditions. The objective will be accomplished through the use of Best Management Practices and adaptive management. Practices include, but are not limited to the following.

- Utilization of key upland herbaceous forage species in key areas will be managed to achieve the goal of light to moderate grazing as a pasture average. The objective is to protect plant vigor, provide herbaceous residue for soil protection and to increase herbage producing ability of forage plants. A utilization guideline of 45% use of key species in key areas will be used to achieve this objective.
- The Forest and permittees will jointly prepare annual operating plans that consider current conditions and management goals. Periodic field checks including stock counts, range readiness and utilization monitoring will be used to identify needed management adjustments. The objective is to assure achievement of resource and management objectives.
- Necessary techniques will be used to achieve proper distribution or lessen the impact on sensitive areas. Practices include herding, salting and controlling access to waters. Salt will be placed on good feed, one quarter to one half mile from waters and salting locations will be moved annually. No hay or bulk feed will be placed on Forest lands.

Wildlife and Plants. The objective is to mitigate impacts to wildlife and sensitive plants from livestock grazing and from disturbance associated with construction of range facilities.

- All new or reconstructed water developments will include wildlife access and escape ramps.
- All new fencing will be built to Forest Plan standards (Forest Plan, p. 35) to provide for wildlife passage through the fence. At a minimum, this will be a 4-strand fence with smooth bottom wire 16 inches off of the ground and a total height of 42 inches or less.
- All proposed range facilities will be surveyed for threatened, endangered or sensitive species prior to any ground-disturbing activities. Facilities will be designed and constructed to have no adverse effect on listed species.
- Range construction projects will be designed to avoid the destruction of agaves. If impacts to agaves are unavoidable, the Forest will insure that no more than 1% of agaves within 800 meters of a project are impacted.
- Within areas meeting the definition of high quality Mearns' quail habitat, herbaceous vegetation will be managed to maintain a minimum of 6 inches of herbaceous stubble height, which is generally interpreted as less than 45% utilization of key herbaceous species. The objective is to provide herbaceous vegetation as cover for quail and other wildlife.
- Stock pond maintenance activities will be conducted in compliance with the Forest's stock pond management and maintenance guidelines for the Sonoran Tiger Salamander and the Chiricahua leopard frog in order to reduce effects to these species as a result of stock pond maintenance activities. The objective is to maintain occupied habitats for the species

Heritage Resources. The objective is to protect heritage resources (historic and prehistoric sites) from impacts caused by range construction projects or livestock concentration.

- All proposed range facilities will be surveyed for heritage resources prior to any ground-disturbing activities. Facilities will be built or modified to avoid impacts to sites. If unrecorded sites are discovered during the course of project implementation, activities will cease and the forest Archeologist will be notified.
- Range facilities, if needed, will be located so as to avoid concentrations of livestock on identified heritage resource sites.
- No salting will occur within or adjacent to identified heritage sites

LIVESTOCK DISTRIBUTION

Use of salt, protein, and other nutritional supplements are encouraged for livestock health and to improve livestock distribution. All supplements will be placed on forage, no less than ¼ mile from water, and away from natural concentration areas such as drainage bottoms, saddles, roads and trails. Supplement locations will be rotated periodically. No hay or bulk feed may be fed on Forest Lands.

- Water may be turned off to discourage livestock use in a portion of a pasture, but must be made available again once livestock leave the pasture.
- Water lots around dirt tanks will be maintained in satisfactory condition to control livestock access to water.
- Regular herding of livestock will be used to improve livestock distribution.

RANGE IMPROVEMENTS

Maintenance of all structural improvements listed in the term grazing permit is the responsibility of the permittee. Likewise, the maintenance of any new improvements as a result of this plan will be the responsibility of the permittee. All improvements must be kept in a serviceable condition.

The Blacktail Allotment DN authorizes the construction of a fence around Sundown Spring in Sundown Canyon to protect aquatic and riparian resources at the spring site. The spring is located in T. 23 S., R. 18 E., the NW ¼ of Section 7. Water from the spring will be piped to a nearby location to provide a reliable source of water for cattle away from the spring. The Forest Service will provide materials and construct the fence and pipeline as a wildlife, range and riparian project. There is no timeline, but NEPA and the required clearances have been completed. As with all allotment improvements, the permittee will be responsible for maintaining the Sundown Spring fence and pipeline.

FIRES

One of the goals of that evolved from the San Rafael Valley ecosystem management planning effort was to re-establish the role of fire on the landscape. Naturally ignited wildfires will be aggressively fought when they endanger life or property. Fires on other portions of the allotment will be fought with a containment strategy, being allowed to burn to the nearest roads or natural barriers. When planning prescribed fires, the permittee will be consulted, so that they will have time to make adequate preparations for the livestock operation, and so the rotation can be altered to allow fine fuels to accumulate. Burned areas will be allowed to rest for 1-2 growing seasons to ensure adequate recovery before livestock will be allowed access.

MONITORING

The objective of monitoring is to determine whether management is being properly implemented and whether the actions are effective at achieving or moving toward desired conditions. Permittees are encouraged to participate in the monitoring activities.

Effectiveness monitoring includes measurements to track condition and trend of upland and riparian vegetation, soil, and watersheds. Monitoring will be done following procedures described in the Interagency Technical Reference[1] and the Region 3

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[1] Sampling Vegetation Atributes, Interagency Technical Reference. 1996. Cooperative Extension Service, USDA Forest Service and Natural Resources Conservation Service, and USDI Bureau of Land Management.

Rangeland Analysis and Training Guide.[2] These data will be interpreted to determine whether management is achieving desired resource conditions, whether changes in resource condition are related to management, and to determine whether modifications in management are necessary. Effectiveness monitoring will occur at least once over the ten-year term of the grazing authorization, or more frequently if considered necessary.

Long term trend monitoring will include, but is not limited to measurements to track upland range condition and watershed condition (hydrologic function). Techniques may include, but are not limited to dry weight rank, comparative yield, pace transects, Parker 3-step, repeat photography, grazed plant count, Grazing Response Index and clipping and weighing.

Implementation monitoring will occur yearly and will include such things as inspection reports, forage utilization measurements in key areas, livestock counts and facilities inspections. Utilization measurements are made following procedures found in the Interagency Technical Reference[3] and with consideration of the Principles of Obtaining and Interpreting Utilization Data on Southwest Rangelands.

Utilization will be monitored on key forage species, which are native perennial grasses that are palatable to livestock. Utilization will be measured after the growing season; however, grazing intensity will be monitored throughout the grazing period in order to practice adaptive management and make necessary management changes needed for plant development and recovery. At a minimum monitoring will include use in key areas, but may include monitoring outside of key areas. The Sierra Vista Ranger District Staff Officer and the permittee will be responsible for monitoring livestock grazing utilization. Over time, changes in resource conditions or management may result in changes in livestock use patterns. As livestock use patterns change, new key areas may be established and existing key areas may be modified or abandoned in cooperation with the permittee.

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[2] Rangeland Analysis and Management Training Guide. 1997. USDA Forest Service, Southwestern Region.

[3] Utilization Studies and Residual Measurements. Interagency Technical Reference. 1996. Cooperative Extension Service, USDA Forest Service and Natural Resources Conservation Service, and USDI Bureau of Land Management. Revised 1999.

Figure 1. A five-pasture rest rotation schedule in which Menefee Pasture is used every winter (November - February). Tom's Pasture is used March through June every year. Sundown, Sunnyside and Campini Pastures receive partial growing season rest every year and complete rest every third year.