ALLOTMENT MANAGEMENT PLAN

FOR

Cochise Head Allotment

Douglas Ranger District

CORONADO NATIONAL FOREST

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INTRODUCTION

The Cochise Head Allotment is located in the northeast section of the Chiricahua Mountain Ecological Management Area (EMA) of the Douglas Ranger District, in Cochise County. The allotment is bounded on the north by the Willie Rose Allotment, on the west by the Rough Mountain Allotment, on the southwest by the East Whitetail Allotment, and on the east by the Forest boundary. Elevations range from 4,800 to over 8,000 feet on Cochise Head. Most capable rangelands are found below 6,000 feet. Total acreage is 6,975, of which 3,198 are considered capable.

The Cochise Head Allotment has previously been permitted to Dr. Christopher Heller for 92 cow/calf pairs and to Dr. Loren Weaver for 34 cow/calf pairs from 11/01 – 04/30; for a total of 998 AUMs.

Monitoring data collected at two permanent transects indicate that the allotment is in fair to good condition with upward trends. Indicators of soil condition such as bare ground and litter show strong positive trends.

An allotment trend study conducted in 1968 indicated that the allotment was in fair range condition with a stable trend. A small area was rated as being in good range condition. There were also areas on the allotment with poor range condition and downward trends.

In 2005, rangeland condition data collected at two monitoring locations indicated that conditions are fair to good. However, there has been an evident increase in mesquite and a corresponding reduction in perennial grasses at lower elevation sites. In the Holding pasture, a large infestation of *Opuntia* affects range condition.

Over the past century, fire has been largely absent from the landscape in the project area due to such factors such as heavy grazing and active fire suppression. As a result, woody plants, especially manzanita and juniper have become dominant on many sites within the oak woodland.

Production/Utilization (P/U) studies conducted in 1995 suggested that a reasonable stocking level would allow for use at 5% above the permitted carrying capacity. A P/U study completed in 2005 suggested a reasonable stocking rate of 311 AUMs, which is more than a 50% decrease from permitted AUMs. These discrepancies most likely are attributable to the low rainfall for those years. The difference between past and present acreage estimates is due to the current availability of GIS technology, and to the fact that slopes greater than 40% are now considered to be non-capable range.

Most of the capable acreage is classified as desert grassland which is comprised primarily of native grasses. Cochise Head Allotment does not have any riparian corridors identified, other than isolated areas around springs.

The allotment is watered by seven springs and one earth dam. Four out of the seven springs are unreliable, and most of them need to be repaired.

A recent assessment of the soil condition indicated that soils are100% satisfactory.

Recent Management

The Cochise Head Allotment has been a five-pasture community allotment with two permittees. The two southern pastures have been permitted to Dr. Loren Weaver for 34 cattle, and the three northern pastures have been permitted to Dr. Christopher Heller for 92 cattle. At the beginning of the grazing season, the cattle have been distributed throughout the pastures according to water availability. As is the case with other nearby allotments, the cattle have been pushed into the higher elevations at the beginning of the winter grazing season and allowed to drift down throughout the season.

The poor condition of many fences and water developments on the allotment have made it difficult to properly distribute cattle and has decreased the reliability of some pastures. Unauthorized cattle have been observed on the allotment in the past, and the permittees have since removed them.

According to the Coronado Forest plan, most of the allotment is in Management Area (MA) 4 for livestock, wildlife habitat, & fuelwood harvest. Cochise Head, located in the extreme upper portion of the allotment, is classified as MA 1.

There has been no current long-range management plan and livestock management has been administered through the use of annual operating plans. Stocking is based on forage conditions and water availability, and fluctuates frequently.

Issues, Concerns, & Conflicts

The following issues were identified during the Environmental Assessment (EA) through field visits to the allotment, discussions with the permittee, consultation with Forest resource specialists, and by soliciting comments from interested publics:

Wildlife, soil and watershed condition, upland vegetation and heritage resources: Continued grazing in the project area could result in effects, either positive or negative, to these items, depending on the timing, intensity, frequency and duration of grazing and other management activities.

Goals and Objectives

The Coronado National Forest Plan has identified goals for the range, wildlife, soil, water and lands, wilderness and recreation programs on the Forest (Forest Plan pp. 9-11). These goals can be found on page 5 of the Environmental Assessment for the Cochise Head Allotment published in June 2008.

In keeping with the Coronado National Forest Plan goals and guidelines for the management areas within the Cochise Head Allotment, more specific conditions for the northern portion of the Chiricahua Mountain Ecological Management Area (EMA) are addressed:

- Continue to improve range trend by increasing perennial native plant cover, in particular allotment desert grassland vegetation type.

- Control or decrease the encroachment of noxious weeds and other undesirable plants ontto Forest land through grazing and pasture rotation.
- Stock allotment annually according to forage and stock water availability.
- Keep all range improvements needed for grazing management in functional working order.
- Communication between the permittee and the Forest Service about management and conditions within the allotment is timely and ongoing.
- The allotment is self monitored by permittee & Forest Service, and only needs spot checks.

Based on Forest Plan goals and site-specific knowledge of the allotment described above, the following objectives constitute the desired condition for the analysis area.

- Livestock stocking is consistent with annual forage production and use is monitored annually. Management controls livestock use and distribution so that sufficient herbaceous vegetation is retained to protect soils and provide herbaceous wildlife cover; zones of heavy use are minimized.
- Ecological sites within the allotment have stable soils, functional hydrology and support functional biotic communities. All sites are at or moving toward high similarity with their potential natural community.
- Lower elevation sites are dominated by warm season native perennial grasses and are increasing in diversity of grasses, forbs and shrubs. Encroachment of Lehmann lovegrass and woody shrubs is controlled as much as possible through management.
- Native vegetation in riparian bottoms is a diverse mix of perennial grasses, forbs, shrubs and trees. Trees and shrubs show no evidence of high-lining or hedging. Suitable riparian bottoms throughout the allotment provide suitable year-round habitat for Montezuma quail and other species dependent on herbaceous and overstory cover.
- Areas with impaired soil condition have increasing ground cover and litter and little erosion.
- Within dense chaparral stands, shrub density contributing to poor ecological condition and high fire hazards is reduced and herbaceous cover is increased.
- Occupied habitats for threatened, endangered, sensitive and management indicator species are maintained or improved and recovery objectives are being met.
- All grazing improvements necessary for management on all allotments are in proper working order and are contributing toward improved livestock distribution and pasture reliability.

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Grazing Strategy

For the northern portion of the allotment the permitted use will remain at 92 cow/calf pairs or equivalent 11/1-4/30 (up to 729 AUMs).

For the southern portion the permitted use will be 34 cow/calf pairs or equivalent 11/1-4/30 (up to 269 AUMs). The allotment will remain a community allotment with two separate permits.

This allotment has been rested for the past few years, and should be grazed according to functionality and availability of livestock water improvements. Fences should also be brought up to satisfactory condition, in particular the Forest Boundary fence between private land and the Holding Pasture. Also, if they haven't already, all unauthorized livestock needs to be removed from the allotment.

The season of use on the Cochise Head Allotment will remain winter seasonal (11/1-4/30) to allow for annual summer growing season rest. The sequence and timing of pasture moves and the timing of entry and exit from the allotment will be based on monitoring of range readiness, ecological condition, water availability and utilization.

Forage utilization will be managed at a level corresponding to light to moderate intensity in order to provide for grazed plant recovery, increased plant vigor, and retention of herbaceous litter to protect soils and provide forage and herbaceous cover for wildlife. Consistent patterns of annual utilization in excess of 45% of key species in key areas will be used as a basis to modify management practices or take administrative actions necessary to reduce utilization in subsequent grazing seasons.

Mitigation

To mitigate resource impacts, the following measures will be implemented. These practices have been demonstrated to be successful when used on similar 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 applicable U.S. Fish and Wildlife Service Biological Opinions. Implementation of the mitigation measures and design criteria is intended to preclude the occurrence of potentially significant environmental impacts.

Soil, Water and Vegetation: The objective is to mitigate effects of livestock grazing and facility construction through the use of Best Management Practices (FSH 2509.22) 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, increase herbaceous residue needed for soil protection and to increase herbage producing ability of forage plants. A utilization

guideline of 30-45 percent use of key species in key areas will be used to achieve this objective.

- Management practices 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. Placement of liquid or bulk supplements will require prior approval of the District Ranger.
- No hay will be placed on Forest lands in order to minimize the introduction of weeds.

Wildlife: The objective is to mitigate impacts to wildlife from livestock grazing and from disturbance associated with maintenance and construction of range facilities. These measures include features developed through the interdisciplinary NEPA process to mitigate effects to wildlife in general, and species specific conservation measures (shown in bold) for listed species.

- All water developments will include wildlife access and escape ramps. Waters will be kept available to wildlife year round.
- All new and reconstructed 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.
- Within areas meeting the definition of high quality Montezuma (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 percent utilization of key perennial grass species. The objective is to provide herbaceous vegetation as cover for quail and other wildlife.

Conservation Measures:

- 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 percent of agaves within 800 meters of a project are impacted. The objective is to avoid impacts to lesser long-nosed bat food resources.
- All proposed waters and fences will be evaluated by a qualified wildlife biologist for effects to 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 improvement projects within Mexican Spotted Owl protected activity centers (PACs) or Goshawk post-fledging family areas (PFAs) will be constructed outside of the breeding season for these species (March 1-September 30), or after a Forest wildlife biologist has determined that nest sites or territories are not occupied.
- The Forest will implement the Forest's Stockpond and Aquatic Habitat Management and Maintenance Guidelines for the Chiricahua leopard frog (*Rana chiricahuensis*). The objectives are 1) to minimize short-term impacts to frogs

while allowing maintenance activities that maintain occupied habitats, and 2) to protect shoreline and emergent vegetation and to improve water quality.

Heritage Resources: The objective is to protect heritage resources (historic and prehistoric sites) from direct or indirect impacts caused by ground-disturbing activities associated with the construction of range facilities and to monitor the effects of cattle grazing on sites to ensure that adverse effects are not occurring. In general, these measures include the following:

- All proposed range facilities will be surveyed by qualified personnel 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 or District 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.
- If impacts from grazing (e.g. excessive trampling, cattle rubbing against and knocking down standing features) are occurring to heritage sites, measures will be taken (e.g. fencing) to protect them.

Livestock Distribution Aids

- 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.
- Supplements will be packed into remote country, and not simply dumped out of a truck where it is convenient, as this does not promote improved livestock distribution.
- 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.
- New water developments will be constructed in uplands to encourage livestock use out of the bottoms.
- Existing 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 improved livestock distribution.

Range Improvement Construction Priority

The following prioritized improvements will be completed to implement the grazing strategy:

1. Construct a water lot around Holding Pasture tank.
2. Bring the Forest boundary fence of the Holding Pasture (1 mile) up to standard, either by repairing or replacement. If the fence is to be replaced, materials will be made available by the Forest Service.

Range Improvement Maintenance

Maintenance of all structural improvements listed on pages 7-11 of 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 Forest Service will assist in supplying materials if budgets allow.

Fires

District wide, there is an effort to re-establish the role of fire on the landscape. Naturally ignited wildfires will only 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 he will have time to make adequate preparations for his 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.

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 and the Region 3 Rangeland Analysis and Training Guide. 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 a minimum of five-year intervals, or more frequently if considered necessary.

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 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. At a minimum, monitoring will include use in key areas, but may include monitoring outside of key areas. The Douglas District Range Staff Officer and the permittees 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 us patterns change, new key areas may be established and existing key areas may be modified or abandoned in cooperation with the permittee(s).

Permittees are strongly encouraged to participate in monitoring activities. Records of livestock numbers, movement dates and shipping records will be kept by the permittee and will be provided to the District Range Staff annually.

Additionally, species-specific monitoring requirements are in place for Mearns' quail, Goshawk, Chiricahua leopard frog, and Mexican spotted owl, as described in the Grazing Strategy portion of the Environmental Assessment.