A BAR DRAW

ALLOTMENT MANAGEMENT PLAN

Prepared By: _____ 2/13/01
Laura W. Dupee — **Date**
and William A. Edwards
Rangeland Management Specialists

Approved By: _____ 02/13/01
Stephen L. Gunzel — **Date**
District Ranger

Agreed to By: _____ Feb 15, 2001
Sidney D. Spencer — **Date**
Permittee

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Allotment Management Plan

INTRODUCTION

A. Permit History

The A Bar Draw (A-Draw) Allotment is located in the northeast end of the San Rafael Valley in eastern Santa Cruz County, Arizona. It is bounded to the east by the crest of the Canelo Hills; to the west by the Coronado National Forest boundary; to the north by the San Rafael Allotment; and to the south by the Lone Mountain Allotment. It lies primarily within Management Area 4 in the Coronado National Forest Plan. A very small area lies within Management Area 1, which is not considered capable for grazing. The entire allotment contains about 4,800 acres, 4,361 of which is considered capable for grazing. The allotment has been permitted to the current permittees for three years.

For about twenty years prior to 1993 the allotment was permitted to the Ki-He-Kah Ranch. The permit was transferred in 1993 and transferred again in 1995 . Both of these permittees attempted to use the allotment year round with only 40 acres of private land to supplement the operation. This resulted in increased grazing pressure on the forest. In 1997 the permit was transferred to the current permittee who has substantially more private land involved in the ranch operation.

During the Lone Mountain / San Rafael ecosystem planning effort of 1992-94 desired conditions were described for the forest land in the area of the San Rafael Valley. The desired conditions and objectives in this document are strongly influenced by that planning effort.

B. Physical Description

The allotment contains five pastures, and can be characterized into four distinct ecological units: Plains Grassland, Shrub, Oak Woodland, and Oak Bottoms.

The plains grassland type on the A-Draw allotment is composed of ancient soil deposits formed into long, deeply dissected ridges, or rolling hills separated by rich swales. The grassland dominates the tops and south slopes of these hills and ridges, which extend westward into the San Rafael Valley. They are primarily composed of mixed perennial short- and mid-grass species. The western portions of the Apache, Picnic, and Gertrudis pastures are best described as being of the plains grassland type. These pastures can be used any time of year, provided there is adequate water. The grasslands are the best portions of the allotment for livestock production, and as such, have historically received the majority of the livestock use, which at times has been excessive.

The shrub ecological type is found in the eastern portions of the Apache, Picnic, and Gertrudis pastures, and the western portions of the Upper Forest and Lower Forest pastures. It is typified by manzanita on shallow, mineralized, poorly developed soils and

relatively steep slopes. Marginal stands of perennial short- and mid-grasses are supported in some areas. The shrub type tends to divide the plains grassland and oak woodland types on the A-Draw Allotment.

The oak woodland type is found throughout the Upper Forest and Lower Forest pastures, and on north slopes and canyon bottoms in the other pastures. It is characterized by oak species over mixed perennial mid-grasses on slopes ranging from 0 to over 40%. It is generally found on deeper, coarse soils where the woody species can out compete many of the short grasses. Soils are often strongly granitic or shale-like in nature.

Some of the larger canyons on the allotment support oak bottoms. All of the drainages are ephemeral in nature, and obligate riparian tree species are only found near scattered springs, seeps, or stock tanks. Most of the larger canyons have very sandy soils due to the granitic materials upstream. They support large mature oaks with a strong understory of mixed perennial mid-grasses. These large canyons are only found in the Picnic and Gertrudis pastures.

C. Current Management

There is currently no long- term allotment management plan for the A-draw allotment. The allotment has a yearlong grazing permit, and management has been planned on an annual operating plan.

The permittee raises commercial English crossbred cattle run in a cow-calf-yearling operation. Cows are bred in the winter to calve in the fall. When the calves become yearlings, they are run in the Upper Forest, Lower Forest, and Gertrudis pastures. The primary cow-calf herd generally uses the Picnic and Apache pastures in conjunction with the deeded land. Being new to the allotment, the permittee does not yet have an established rotation schedule.

D. Concerns and Conflicts

The Lesser long-nosed bat (leptonycteris cursoae) and the Sonoran tiger salamander (Ambystoma tigrinum stebbinsi) are the only threatened, endangered or sensitive species know to inhabit the allotment. The terms and conditions of the attached Biological Opinion (June 30, 1999) are part of this Allotment Management Plan. Species of concern found on the allotment include Mexican long-tongued bat (Choeronyteris mexicanus).

Drought conditions and heavy use by the previous permittee has resulted in impaired watershed and range conditions on the southwest portion of the Apache pasture. Care needs to be taken to ensure that appropriate summer rest is achieved in these areas as well as in all pastures on the allotment. With growing season rest, forage production as well as range and watershed conditions will improve in the lower three pastures.

Some of the grasslands are being encroached upon by manzanita. A brush cutting operation was accomplished in the mid-1970's. It may be time for a re-treatment on sites that have potential for improvement.

Recreational opportunities on the allotment are fairly limited. There are no official trails on the allotment, although hikers and mountain bikers use some of the roads. Populations of Mearn's quail, white-tailed deer, mule deer, javelina, and black bear draw hunters every year. Some of the stock tanks are said to have introduced bass populations.

Illegal activity, such as smuggling drugs and illegal aliens from Mexico, is a common occurrence on the allotment. These actions as well as the efforts of the federal law enforcement agencies to stop them, have adverse impact on resource conditions through the development of unauthorized roads, trails, and subsequent erosion that comes with them.

Minor archaeological sites have been identified in portions of the allotment, and need to be considered when planning improvements or other management actions.

GOALS AND OBJECTIVES

A. Goals

Increase or maintain perennial vegetation to provide sufficient ground cover for soil protection and wildlife habitat.

Maintain satisfactory vigor, density, and composition of forage plants.

Manage livestock to obtain multiple use resource objectives that are consistent with the guidelines of Coronado National Forest Plan.

Improve or maintain watershed conditions so that duration of surface flow is increased, and sediment loads are decreased.

Maintain herbaceous vegetation in riparian areas sufficient to protect and stabilize stream banks.

Maintain livestock grazing as a sustainable, profitable resource use.

Maintain or increase population numbers for rare species affected by grazing.

B. Resource Objectives

Maintain utilization levels on key forage grasses at 45% or less of annual production by weight in key grazing areas.

Maintain utilization levels on browse species, including riparian trees past the seedling stage, at 50% or less of annual stem production browsed.

Give all forage plants sufficient growing season rest to fully recover from the effects of grazing.

Maintain or improve the range conditions to fair or better in relation to the site potential as defined by the Natural Resource Conservation Service Guides.

Maintain or improve watershed condition (Hydrologic function) rating to satisfactory, and soil condition to fair or better.

Resist the encroachment of woody species into the grasslands.

Facilitate an increased role of fire in the area of the A- draw Allotment.

MANAGEMENT PLAN

A. Grazing Strategy

Flexibility will be the key to continued resource improvement on the A-Draw allotment. The ranch will still continue to primarily run a cow-calf-yearling operation. Cattle will be bred in the winter to drop calves in the fall. Raising yearlings will add to the flexibility of the overall operation.

A deferred rest rotation grazing system will be implemented. Stocking rates and actual timing and duration of grazing each pasture will be determined by the frequency and amount of rainfall, and by utilization levels. Providing sufficient rest periods for plant recovery will also be a determining factor in the rotation. Due to the topography and water availability of the Upper Forest pasture, it will only be used in the cooler months of the year, often only by yearlings. Since the Apache, Picnic, Gertrudis, and Lower Forest pastures can be used any time of the year, water and forage availability will be determine when they will be used each year. Generally, the Upper Forest, Lower Forest, and Gertrudis pastures will primarily be used by yearlings, while the Picnic and Apache pastures will be used by cow-calf herd in conjunction with private lands. Every pasture will receive at least partial growing season rest every year.

Utilization rates on primary forage species will not exceed 45% use by weight of the annual production in key areas. In an effort to aid livestock distribution, salt, mineral, and protein supplements will be placed on feed, at least 1/4 mile from water, in areas of traditional light use. No bulk feed such as hay or grain will be fed on the allotment, unless it is being used as a tool in an authorized management action.

B. Improvements

The following improvements will be completed. The implementation of this plan is not dependent upon, but will be enhanced by, the completion of these improvements.

1. A pipeline will be constructed to deliver water from the existing storage at the Gertrudis well (#301018) to the corrals at the corner of the Upper Forest, Lower Forest, and Gertrudis pastures. This water will service all three pastures, and will improve livestock distribution in all three pastures. Permittee will supply materials and labor. USFS will supply storage tanks.

2. The existing Ki-HeKah pipeline (#301025) will be extended to service the northwest Gertrudis pasture. Permittee will supply materials and labor. USFS will supply storage tanks.

3. A pipeline will be constructed to deliver water from the existing storage at the Jeep windmill to four locations on the east side of the Upper Forest pasture. This will provide reliable water to this portion of the pasture, and will improve control and distribution of livestock. None of the existing dirt tanks on the east side of the pasture are reliable. Permittee will supply materials and labor. USFS will supply storage tanks.

4. Repairs will be made to the spillway of the Picnic Tank (#301009).

5. Additional storage will be added to the existing Ki-HeKah pipeline at the lower two drinkers. Permittee will supply materials and labor. USFS will supply storage tanks.

6. An electric fence will be installed to prevent livestock use in the southwestern portion of the Apache pasture. Livestock will be excluded until at least 17% persistent litter has been accumulated. After such time normal livestock grazing may resume.

The following are optional improvements:

1. Drilling a well in the middle of Apache pasture for an additional reliable water source in the pasture.

2. Reconstruction of the existing corrals at the corner of the Upper Forest, Lower Forest, and Gertrudis pastures, and the Middle corrals.

3. Location and development of Mountain spring (#301022) to improve livestock distribution in the Lower Forest pasture.

4. Mechanical control of manzanita encroachment into the grassland pastures.

Forest service contributions are dependent upon the availability of funds, relative to other district and forest priorities.

All range improvements will be regularly maintained and kept in serviceable condition.

Before dirt tanks are cleaned out, the permittee will coordinate with the district range or wildlife staff officers to ensure that such maintenance activity will not adversely effect resident Sonoran tiger salamander populations, inaccordance with the terms and conditions of the attached biological opinion (June 30, 1999)

All pipeline troughs will be kept full, even when no livestock are in a pasture. This does not mean that pipelines need to be left open, but rather, that troughs need to be refilled periodically. Additionally, all troughs will be equipped with wildlife escape ramps, or another means which will allow small animals to safely get to and from the water. These measures are intended to allow wildlife year-round access to water.

C. Fires

One of the goals of that evolved from the San Rafael Valley/Lone Mountain ecosystem management planning effort was 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 she will have time to make adequate preparations for her livestock operation, and so the rotation can be altered to allow fine fuels to accumulate.

D. Stocking

The grazing permit for the A-Draw allotment is for 142 cattle year long; however, a memorandum of understanding between the USFS and the permittee is in place which allows the permittee to stock far less than the full numbers. Conservative stocking over the first few years is strongly encouraged to give the permittee time to learn how livestock will work and respond in each pasture. After the plan has been implemented for a few years, a production/utilization study will be undertaken to help determine what the proper stocking should be under the new management. The permit will be adjusted at that time to reflect the results of the study.

E. Monitoring

Key grazing areas have been identified in each pasture, and will be monitored for utilization levels and long-term trend. The permittee is encouraged to participate in the monitoring practices. Close records of livestock numbers, movements dates, shipping records, and rainfall dates and amounts will be kept by the permittee and will be provided to the USFS annually. Long term trend monitoring will include, but are not limited to: measurements to track upland range condition and watershed condition (hydrologic function), as well as the use of permanent photo points. Techniques may include, but are not limited to: dry weight rank, comparative yield, pace transects, parker 3-step, repeat photography, grazed plant count, and clipping and weighing.