TEX CANYON

ALLOTMENT MANAGEMENT PLAN

DOUGLAS RANGER DISTRICT

CORONADO NATIONAL FOREST

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TEX CANYON ALLOTMENT

I. INTRODUCTION

A. Basic Description

The Tex Canyon Allotment is located on the southeast portion of the Chiricahua Mountains, Coronado National Forest. The elevation of the allotment ranges from 5,000 feet in Tex Canyon bottom to 7,505 feet on Swede Peak. Allotment encompasses a total of 18417 acres of which 440 acres are deeded. Of which 9124 acres are full capacity range (1982 Production/Utilization Study). Tex Canyon and Shake Gulch are the two main drainages that drain the allotment. Nearly the entire allotment is tributary to the San Simon Creek. An insignificant portion (about 380 acres or 2%) is tributary to San Bernardino Valley.

B. History

The permittee for Tex Canyon Allotment is the Krentz Ranch partnership which is a family run operation. The Krentz's are currently running a cow/calf cross-bred operation. The current permit states: 600 cattle from November 1 to February 28; and 150 cattle from December 1 to February 28. Plus an On/Off permit for 60 bulls 10/01-02/28, 31 yearlings 10/01-04/15, and 4 horses from 03/01-02/28. The Krentz family has declined to claim a private land grazing permit application for 280 (+) acres of private land within the allotment. This means they will not recieve credit for the private land in holding in Animal Unit Months.

Cattle have gone on the allotment around November 1, or after the first hard freeze and remained until February 28 due to the poison problem that occurs with mountain mahogany on limestone soils. This shortened season has worked well in that the permitted cattle readily graze the upper areas during the winter season. In the early spring their natural drift brings them into the lower pastures. Where the Shake pasture will be avialable for use.

The last Allotment Management Plan (AMP) was developed in 1984 for the this allotment. At the time of implementing the AMP, permitted stocking was reduced by 30 percent to comply with available resources. Prior to development of AMP two years of Production/Utilization (P/U) studies were completed to determine estimated stocking and utilization patterns of livestock.

Over the last twenty years the Tex Canyon Allotment has seen a severe encroachment of mesquite and Alligator juniper into the open grassland. In 1994 a project was completed to grub out most of the mesquite and

juniper in the Shake and Red Hill Pastures. The objective of removing the mesquite and juniper was to maintain an open grassland community. This project was quite successful but the extent of juniper throughout rest of the allotment is of concern.

C. Riparian

There are 5.0 miles of riparian area along the two main drainages of Tex Canyon and Shake Gulch. Tex Canyon is in mostly satisfactory condition. Shake Gulch is more limited for potential riparian area development, but is considered to be in satisfactory condition. Obligate species found in these two canyons are typical of riparian areas found throughout Southern Arizona, with the exception of Bald cypress. All age classes are well represented in the Tex Canyon riparian area, and lacking in the Shake Gulch riparian area.

D. Soil/Water/Air

Soils on this allotment are generally very cobbly and moderately erodable. The more gentle country along Tex Canyon valley has a mixture of perennial and annual grasses and forbs. In the first four years, the area of mesquite and juniper push has very few perennial grasses and almost no litter cover. But now, the perrennial grasses continue to increase over time. The uplands are generally in satisfactory condition because of reduced utilization levels and the presence of some trees and brush that supply litter. All soils must be managed to maintain or improve long-term productivity.

No tests have been made in this reach to determine water quality support of designated uses. Those areas of unsatisfactory soil conditions may contribute sediment and turbidity during periods of overland flow. Satisfactory riparian conditions over most of the allotment provide some filtration and serve to produce high quality water. The allotment is not within an Air Quality Non-attainment Area for any air quality constituent. It is partially within a Class I Wilderness Area.

E. Recreation

Recreation use on the Tex Canyon Allotment is one of several uses of the area. There are no developed campgrounds in the area but having a main arterial road through the allotment allows a wide assortment of the public (dispersed campers, rock hounds, hikers, wood cutters, and hunters) to use area. The only known conflicts between grazing and recreation on this allotment has been where some individuals have vandalized range improvements and driving cross country creating new roads. These activities add to the cumulative effects on vegetation, wildlife, and soils in this area.

F. Wildlife Habitat

The allotment is composed of various vegetation types, the extensive riparian areas as mentioned above, the Plains Grassland, Madrean Montane Conifer Forest mostly found in moist canyon bottoms, Pinyon/Juniper Woodland typical of north facing slope of Limestone Mountain, and the Madrean Evergreen Woodland composed of a variety of oak species and invading Alligator juniper. The evergreen woodland is what entails most of full capacity range. Within these vegetation types have other shrub species, such as manzanita, mountain mahogany, Desert ceanothus, cat claw, Desert sumac, and silktassel. Within these diversity of vegetation types have an array of wildlife species representative of the Chiricahua Mountains. Both whitetail and mule deer, javelina, coyotes, coatimundi, black bear, mountain lion, porcupine, cottontail rabbits, Mearn's quail, Red tail hawks, turkey vultures, and numerous other birds, reptiles, amphibians, and insects make-up the biotic component within Tex Canyon. Water availability on the Tex Canyon Allotment is better than most, with 15 earthen tanks, and between 10 to 11 miles of pipeline to a dozen troughs. Most troughs are equipped with escape ramps and troughs are low to the ground to provide water to wildlife.

The district biologist has identified the areas to the south and southeast of Sunset Peak as been identified as key Mearns quail habitat. It has also been noted that key browse habitat still exist on the southern slopes of limestone mountain and contains exceedingly tall growth forms of such species as mountain mahogany. Threatened & Endangered and Sensitive Species of the area can be noted in the Enivironmental Assessment and the Biological Assessment and Evaluation documents.

G. Other uses and Coronado National Forest National Management Areas

The Forest Service has the Coronado National Forest Land Management Plan to guide it's management of livestock grazing in the Douglas Ranger District. The majority of the forest acres are classified into Management Area 4, which emphasizes sustained harvest of livestock forage and fuelwood, while maintaining and improving wildlife habitat. The lower portions of Shake Gulch and Tex Canyon drainages are in Management Area 7 (B), which emphasizes managing to perpetuate the unique wildlife or vegetation species while producing livestock forage and fuelwood on a sustained basis. Visual quality objectives will be met. All riparian areas not designate in Management area 7 will need to follow the standards and guideline of the Coronado National Forest Plan noted in "Management Prescription Applicable to all areas of Forest" section. A smaller portion of the forest acreage is classified as Management Area 1, which emphasizes visual resources and semi-primitive dispersed recreation. Another small portion of the

allotment is classified in Management Area 9, which emphasizes management for wilderness values while providing livestock grazing and providing recreation opportunities that are compatible with maintaining wilderness values and protecting resources. Refer to the Coronado National Forest Land Management Plan for each management area standards and guidelines.

II. GOALS AND OBJECTIVES OF MANAGEMENT

Goal:

* Maintain or improve bio-diversity through grazing management by harvesting a renewable resource in a manner that is consistant with the perpetuation of functioning natural ecosystem.

Objectives:

* Continue to maintain a viable livestock operation.

* Maintain or improve riparian areas for obligate riparian species needs by time controlled grazing. While increasing diversity and age classes of riaprian species.

* Maintain and/or decrease the encroachment of woody vegetation, while maintaining the natural ecosystem to support bio-diversity for a viable livestock operation, and wildlife habitat.

* Improve ground cover through increasing species diversity and distribution including cool and warm season grasses.

III. MANAGEMENT STRATEGY

The current/future operation is a cow/calf with the forest stocking rate of 600 cows 11/01-02/28 and 150 cows 12/01-02/28; including 60 bulls 10/01-02/28, 31 yearlings 10/01-04/15, an on/off permit for 4 horses from 03/01-02/28. Allotment is composed of 8 pastures which are: Upper Tex Pasture, Juniper Pasture, Lower Tex Pasture, Limestone Pasture, Doan Pasture, Red Hill Pasture, Finger Pasture, and Shake Pasture.

The present strategy is to put the cows in the Limestone Pasture and allow them to move on to Lower Tex Pasture, until there is a hard freeze to reduce the effect of Limestone Poisoning associated with mountain mahogany. At this time, between 175 and 300 cows will put into the Upper Tex Pasture (due to large pasture size). Also 100 to 175 will be put into the Juniper Pasture with the remaining 175 to 300 cows in Lower Tex Canyon. The gates will be opened between the Juniper and L.Tex Pastures to maintain better cattle distribution and unneeded stress on the livestock. The Shake Pasture gates will be opened around February 1 to allow cattle to drift into this pasture and alleviate pressure along the fence. 150 cows will be put into the Red Hill pasture from December 1 to February 28. The Doan pasture will have the bulls from 10/1 to 2/28. They will graze these pastures until

proper utilization is achieved (@55% on key forage). The yearlings are placed in the Finger pasture which is an isolated area that has no developed water. The only feasible way to use this pasture is in combination with the permittee's adjacent private land. When utilization in the lower areas of this pasture reach 45%, the cattle will move out. As part of the permit a special provision allows the permittee to leave the gates open in the Finger Pasture during the off-season to avoid any cattle from becoming stranded. In addition to rotating pastures, permittee is also required to implement the Best Management Practices (BMP) outlined in the annual operating plan.

Continuation with current management where allotment is strictly grazed during the winter months would continue gradual improvement of allotment range condition. BMP's will have to be continued, with emphasis to increase cattle distribution away from main Tex Canyon drainage. By providing spring and summer rest allotment range condition should continue to improve where over the period of this permit, there will be a improvement in plant composition and density. But encroachment of woody species may negate the current range condition.

IV. DISTRIBITION AIDS

A. Water: Developed waters on the allotment will be used to distribute cattle where possible. It will be the responsibility of the permittee to maintain water developments which include cleaning out of earth dams. All developed waters on the allotment will be maintained for wildlife yearlong (water availability, access and escape ramps, etc.).

B. Trails: Permittee will be allowed to maintain historic stock trails for livestock distribution and herding. Maintenance of trails will consist of brushing (blazing) to a width of four feet and to the height of a person on horseback. Any large loose rocks should be removed from the trails.

C. Salt and Supplemental Feed: Salt and Supplement feed on the forest will be used to encourage cattle distribution, by placing salt and supplemental feed at least 1/4 mile from water, where feasible. Placement of salt and supplemental feed at or close to meadows and main stock trails will need to be avoided. These salt and supplemental feed will need to be re-located at a different site each year.

D. Herding: Riding to distribute livestock may be necessary in order to reduce concentrations of stock, or reduce tendency of cattle to use preferred and historic concentration areas. It may be necessary to move stock around for more uniform utilization.

E. Fencing: Fences will be maintained by permittee in order to achieve proper utilization and keep the integrity of pasture and/or allotment. Any fences to be constructed or reconstructed will be built to Forest Service specifications.

V. RANGE IMPROVEMENTS

Structural: No new structural improvements have been scheduled at this time. Maintenance of current structural improvements will be maintained as outlined in Forest Service Form FS 2200-5 of the permit.

Non-structural:

1) Continue to maintain Mesquite/Juniper push in Shake and Red Hill pasture. This area will be maintained by Hand Grubing new juniper, and mesquite seedlings.

2) Prescribe Fire: approximately 12,000 acres of a prescribe fire is planned in the Limestone Mountain area. Tentative date: spring/summer of 1999. A IRM ride is planned for the fall of 1997. A draft map will developed for the IRM ride.

3) Vegetation: The increasing invasion of mesquite, manzanita, juniper, and pinyon on the Tex Canyon Allotment has caused & will cause a reduction in ground cover (grass species) to occur over time. A fuel wood sale, prescribed/natural fire, and herbicises may be considered as future vegetation manipulation measures. A separate Enivironmental Assessment will address these at the time of implantation.

VI. MAINTENANCE OF IMPROVEMENTS

Range Improvement maintenance responsibility is assigned to the permittee, and permittee is required to have these improvements in functional condition. Any new range improvements developed will be assigned to the permittee. National Forest range improvements on the forest are noted on Form 2200-5 of the term permit.

VII. EVALUATION AND FOLLOW-UP

Evaluation and/or monitoring will consist of the Forest Service conducting annual inspections to look at range/watershed conditions, to determine if objectives are being met, if problems exist in the management plan, and what possible solution to the problem may be feasible. Inspections will be conducted with permittee and other interested parties.

At the time of validating grazing permit, an annual operating plan will be developed between permittee and the Forest Service. Annual operating plan will be an extension of this plan, document any changes for season, range improvements needing maintenance, planned projects, and other related activities that involved the forest. Permittee will be responsible in providing the Forest Service with actual use number at time of permit validation for the previous year's use.

VII. APPENDIX

Forest Service Allotment Map

Low intensity ground fires allowed at any time in all forested cover types, but high intensity crown fires are not acceptable in the post-fledging family area or nest areas. Avoid burning the entire home range of a goshawk pair in a single year. For fires planned in the occupied nest area, a fire management plan should be prepared. The fire management plan should minimize the risk of goshawk abandonment while low intensity ground fire burns in the nesting area. Prescribed fire within nesting areas should be planned to move with prevailing winds away from the nest tree to minimize smoke and risk of crown fire developing and driving the adults off or consuming the nest tree.

G. Ground Surface Layer (All forested cover types)

Manage road densities at the lowest level possible. Where timber harvesting has been prescribed to achieve desired forest condition, use small, skid trails in lieu of roads.

Piling of debris should be limited. When necessary, hand or grapple piling should be used to minimize soil compaction within piles and to minimize forest floor and herbaceous layer displacement and destruction.

Limit dozer use for piling or scattering of logging debris so that the forest floor and herbaceous layer is not displaced or destroyed.

GRAZING MANAGEMENT

Standards: Forage use by grazing ungulates will be maintained at or above a condition which assures recovery and continued existence of threatened and endangered species.

Guidelines: Identify key ungulate forage monitoring areas. These key areas will normally be 1/4 to 1 mile from water, located on productive soils on level to intermediate slopes, and be readily accessible for grazing. Size of the key forage monitoring areas could be 20 to 500 acres. In some situations such as high mountain meadows with perennial streams, key areas may be closer than 1/4 mile from water and less than 20 acres. Within key forage monitoring areas, select appropriate key species to monitor average allowable use.

In consultation with US Fish and Wildlife Service, develop site-specific forage use levels. In the event that site-specific information is not available, average key species forage utilization in key forage monitoring areas by domestic livestock and wildlife should not exceed levels in the following table during the forage growing season.

ALLOWABLE USE GUIDE (percent) BY RANGE CONDITION AND MANAGEMENT STRATEGY *

Range Condition **	Continuous Season-long Use	Defer 1 Year in 2	Defer 1 Year in 3	Defer 2 Years in 2	Rest 1 Year in 2	Rest 1 Year in 3	Rest 2 Years in 3	Rest 2+ Years in 3
Very Poor	0	10	5	15	15	10	20	25
Poor	10	20	15	20	20	15	30	35
Fair	20	25	20	30	30	25	40	45
Good	30	35	35	35	35	35	45	50
Excellent	30	35	35	35	35	35	45	50

* = Site-specific data may show that the numbers in this table are substantially high or low. These numbers are purposefully conservative to assure protection in the event that site-specific data is not available.

** = Range Condition as evaluated and ranked by the Forest Service is a subjective expression of the status or health of the vegetation and soil relative to their combined potential to produce a sound and stable biotic community. Soundness and stability are evaluated relative to a standard that encompasses the composition, density, and vigor of the vegetation and physical characteristics of the soil.

The above table is based on composition and climatic conditions typical of sites below the Mogollon Rim. On sites with higher precipitation and vegetation similar to sites above the Mogollon Rim, allowable use for ranges in poor to excellent condition under deferment or rest strategies may be increased by 5%. The guidelines established in the above table are applicable only during the growing season for the identified key species within key areas. Allowable use for key forage species during the dormant season is not covered in the above table. These guidelines are to be applied in the absence of more specific guidelines currently established through site specific NEPA analysis for individual allotments.

Guidelines for allowable use for specific allotment(s) management or for grazing strategies not covered in the above table will vary on a site-specific basis when determined through the Integrated Resource Management (IRM) process.

Allowable use guidelines may be adjusted through the land management planning revision or amendment process. Guidelines established through this process to meet specific ecosystem objectives, will also employ the key species and key area concept and will be monitored in this manner.

OLD GROWTH

Standards: Until the forest plan is revised, allocate no less than 20 percent of each forested ecosystem management area to old growth as depicted in the table below.

In the long term, manage old growth in patterns that provide for a flow of functions and interactions at multiple scales across the landscape through time.

Allocations will consist of landscape percentages meeting old growth conditions and not specific acres.

Guidelines: All analyses should be at multiple scales - one scale above and one scale below the ecosystem management areas. The amount of old growth can be provided and maintained will be evaluated at the ecosystem management area level and be based on forest type, site capability, and disturbance regimes.

Strive to create or sustain as much old growth compositional, structural, and functional flow as possible over time at multiple-area scales. Seek to develop or retain old growth function on at least 20 percent of the naturally forested area by forest type in any landscape.

Use information about pre-European settlement conditions at the appropriate scales when considering the importance of various factors.

Consider the effects of spatial arrangement on old growth function, from groups to landscapes, including de facto allocations to old growth such as goshawk nest sites, Mexican spotted owl protected activity centers, sites protected for species behavior associated with old growth, wilderness, research natural areas, and other forest structures managed for old growth function.

In allocating old growth and making decisions about old growth management, use appropriate information about the relative risks to sustaining old growth function at the appropriate scales, due to natural and human-caused events.

Use quantitative models at the appropriate scales when considering the importance of various factors. These models may include, but are not limited to: Forest Vegetation Simulator, BEHAVE, and FARSITE.

Forested sites should meet or exceed the structural attributes to be considered old growth in the five primary forest cover types in the southwest as depicted in the table on page 24.

SPECIAL PROVISION

THIS IS IN REGARDS TO USE OF THE FINGER PASTURE WHICH ENCOMPASSES 950 ACRES OF DEEDED AND 470 ACRES OF STATE LEASED LANDS IN CONJUNCTION WITH ABOUT ONE SECTION OF GRAZABLE NATIONAL FOREST LAND. THIS PASTURE IS GRAZED BY 31 COWS FROM 10/01-04/15 UNDER AN ON/OFF PERMIT, ALTHOUGH NATIONAL FOREST BOUNDARY IS FENCED ON-LINE, GATES ARE LEFT OPENED (10/01-4/13) BECAUSE LACK OF RELIABLE WATER ON THE FOREST. IT IS HERE-BY GRANTED TO THE PERMITTEE TO ALLOW GATES TO BE LEFT OPENED DURING THE OFF-SEASON TO AVOID ANY CATTLE FROM BECOMING STRANDED.

Brian L. Power
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19 Dec 95
DATE