

ALLOTMENT MANAGEMENT PLAN

PARTRIDGE CREEK

WILLIAMS RANGER DISTRICT

KAIBAB NATIONAL FOREST

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Basic Description of Project Area

The Partridge Creek Allotment is located six miles north of Ash Fork, Arizona and contains 24,952 acres. Of that amount, 564 acres is excluded from grazing due to these areas being fenced right-of-ways or private land. Of the remaining 24,388 acres 66 percent or roughly 16,000 acres is considered suitable for grazing and an estimated capacity calculated. The remaining lands are classed as either potential or no capability to sustain livestock activity and were excluded from any capacity assessment. The NC classifications were normally associated with steep slopes or very shallow soils. In contrast the PC areas usually occupied gentle slopes but due to high basal areas of trees, as an example, forage production was so low that assigning any capacity was not warranted. In most cases the PC classed lands represent dense stands of woodland species including Utah juniper, one-seed juniper and pinyon pine. There are four main pastures including Indian, Big Aso, Little Aso, and South as well as several small holding units.

Goals and Objectives of Management

The goals of the revised management plan for the Partridge Creek Allotment include the following items:

1. Produce the maximum amount of forage, consistent with other resource values, for use by wildlife and livestock on a sustained yield basis.
2. Improve habitat diversity, forage production, and overall capacity for both livestock and wildlife in the pinyon-juniper ecosystems. Currently, the high tree density has reduced overall capacity and range resource value ratings. This concentrates livestock activities in the key grasslands and limits distribution of grazing impacts.
3. Balance capacity of the project area with the management intensity demonstrated by the grazing permittee and the forage capacity inventoried within the allotment.

To accomplish the above stated goals a series of site specific objectives were developed and management practices identified. Over the next five to 10 years the activities to be implemented to achieve the desired conditions include:

1. Implementation of a deferred rotation grazing strategy, change in season of use from summer to winter (11/01 to 04/30), conversion to calf/calf operation, and the suspension of 30 percent of the term numbers (95 adult livestock) until monitoring has verified the true capacity of the allotment.
2. Identification and additional NEPA assessment of 7,600 acres for vegetation manipulation of which 4,380 acres will occur on the upland sites with the remaining 3,220 acres localized to the alluvial bottomlands.
3. Construction of one trick tank, and the reconstruction of 12 miles of Forest boundary fence, six waterlots, and the sealing of Lower Cedar Tank.

Animal Husbandry and Type of Operation

The permittee maintains a cross breed commercial herd. Under current management the bulls are removed in late fall and placed onto State or private lands around Heifer Tank or north of the forest boundary. The breeding season begins around April 1 with most of the calving occurring between February 1 and March 31 in any given year. The long breeding period necessitates a small number of calves carried over through the winter grazing period due to their young age at fall weaning.

Permitted Number and Season of Use

The term permit will be issued for 225 adult cattle with 95 head held in suspension until additional assessments have verified the true capacity of the allotment. The season of use will be from 11/01 to 4/30.

Range Limitations and Allowable Use

Several limitations are inventoried on the allotment which will effect livestock distribution patterns. The high percentage of woodland trees, which reduces the density of forage plants in the understory, concentrates livestock activities in the open grassland type. These grassland communities represent a small percentage of the allotment and without proper herding and adequate time control, what capacity is available on the upland sites will not be utilized. This could result in utilization levels above the established allowable and limit improvements in range related values.

The allowable use is set at 40 percent in the key areas (grassland and savanna type) during the dormant period and 30 percent within the growing season which is considered from March 15 to April 30.

Problems and Conflict

Several problems areas are found on the allotment and could result in resource conflicts. The sandstone quarry operations impact the livestock permittee and other users by reducing the suitability for vehicular traffic on forest roads. This is especially prevalent during wet weather conditions when some operators continue to haul rock. In addition, there is the potential for accidents between haul trucks and other traffic during the mining operations.

The permittee has reported several cases of high predation on young calves. Since these incidents do not occur every year or within the same grazing units, it is difficult to handle the problem with modifications in the grazing schedule. If problems continue, either an assessment on a proposal which authorizes trapping will have to be undertaken or a new AMP will have to be developed, which considers a grazing strategy which places the livestock off the forest during calving.

Sandstone tank is a shared improvement between the Double A and Partridge Creek permittees. Fencing associated with access to this improvement from the Double A and Partridge Creek Allotments will be maintained by the respective permittees.

Grazing Schedule

The management strategy calls for a deferred rotation sequence. The grazing sequence generally follows this pattern:

A. Those pastures grazed in the growth period (after March 15) will be deferred for at least two, and if possible three years to provide recovery on the cool-season forage species and provide for litter production. At the conclusion of the deferment period it will again be scheduled for grazing in the growing season. Every pasture will be allocated during a grazing season, though, the long deferment after grazing and the reduced stocking is predicted to increase range related values as well as improve wildlife habitat, especially low/height cover.

B. During the non-growth period (November 1 to March 15) the herd will be split between two or possibly three units. Once the cool-season plants begin growth in the spring, the livestock will be gathered and placed in one pasture until the grazing season is concluded. It is also recognized that during some grazing seasons the potential exists for the allocation of two units during the growing period.

The planned grazing sequence is shown graphically on the attached form R3-2200-19.

Distribution Aids to be Used

Salt is an important tool in obtaining livestock distribution and should be placed away from waters to achieve proper use in areas that historically do not receive livestock impacts. No more than three blocks of salt should be used, and these supplements need to be placed in bins or on rocks to prevent soil contamination. Once the salt is used, replacement areas are required to prevent trampling and plant loss.

Supplemental feeding is not encouraged, although, it is recognized that current forage conditions may not furnish all the animals needs and requirements. In addition, under heavy snow cover feeding of alfalfa might be required to cover the energy requirements of the animals. In both cases the same standards as the salting program apply. The permittee will also be required to keep a list of the supplements used and the locations so inspection of said areas can be accomplished.

Gates on waterlots are to be open. On occasions temporary closing will be permitted to assist in attaining proper livestock distribution. At the completion of the pasture move the permittee is required to re-open and make the improvement available to wildlife.

Herding is considered the most effective tool in achieving the proper utilization patterns on the allotment, and maintaining the livestock in the scheduled pasture. This is especially important during the spring months when the plants begin to grow. Without the livestock in the appropriate unit the disclosed deferment schedules, as displayed in the environmental analysis, will not be met. The permittee will be required to complete all moves within a 10

day time limitation, unless weather or some other factor hampers the gathering and prior permission is granted.

New construction and reconstruction is displayed in the following table.

Table - 1: Structural improvements authorized for the revised Partridge Creek Allotment Management Plan.

<u>Improvement Name</u>	<u>Priority</u>	<u>Remarks</u>
Boundary Fence (South)	1	This proposal will be funded by the Forest Service. The Agency will provide materials and labor to construct five miles of boundary fence which needs replacement. This is a high priority as it borders a private real estate development and the fence is in poor condition.
Waterlot Reconstruction	2	Six waterlots were inventoried with wire spacing not meeting specifications. The Forest Service will provide all materials and labor to reconstruct these improvements. The six facilities that need to be brought up to wildlife fencing standards include, ^{→ 2 sides} 1. Costello, 4. Indian, 3. Punk, Little Aso, 2. Hiefer, 5. Quarry Tanks.
South Pasture Trick Tank	3	Forest Service will purchase materials and provide labor to construct.
Boundary Fence (North)	4	Forest Service will purchase materials and provide labor to construct.
Sealing of Lower Cedar Tank	5	Forest Service has purchased and delivered to the tank site 48 tons of betonite. Permittee will spread when tank conditions are optimum.
Maintenance push within the Blue Cow Tank Area.	6	Permittee will provide equipment to undertake this project and Forest will purchase appropriate seed and provide labor to conduct seeding. Total acres involved with this proposal is estimated at 325 acres.

All construction, reconstruction, and heavy maintenance of improvements will require advance written approval from the District Ranger. This approval will be provided with the issuance of the permit modification. Forest Service will undertake the necessary surveys and provide the needed NEPA analysis. Prior to the implementation of the project the Forest Service and grazing permittee will review the standards on-the-ground and said guidelines will be incorporated into the permit modifications. If established standards require modification, work will be terminated until the permittee and Forest Service have discussed the situation, and a written authorization to modify has been received.

Vegetation manipulation to promote improved range resource conditions, watershed health, forage/cover ratios and the overall capacity of the allotment will be undertaken under this plan as funding becomes available. This includes identification of proposed treatment units, silvicultural exam, assessment for cultural resources and proper NEPA documentation. Seeding with native forage species will be determined on a case by case basis and will be the result of the environmental analysis process. The Agency will develop a proposal for the harvest of 400 to 600 acres of fuelwood in the Little Aso tank area in 1995. The target sale date for this resource improvement project is April 1996.

The permittee is required to maintain those improvements listed in the term permit. The improvements assigned to the Partridge Creek Allotment with notations on current conditions are displayed in the FSRAMIS report, and are attached with to this document.

Monitoring Action

To a large degree this portion of the plan can be found in the Environmental Assessment completed for the allotment pages 61 through 64. The types of monitoring, what that activity includes, and the specific objectives include:

A. Implementation monitoring determines if the program of work activities, prescriptions developed to meet objectives, and livestock management have been implemented as designed, and in compliance with the Forest Plan. Specific actions to be undertaken are:

1. Key Area Utilization Monitoring - Key areas have been identified and will be assessed for compliance to the allowable use criteria as found in this plan. If monitoring establishes rates above this standard, either a reduction in the number of livestock or a shorter grazing period will be implemented. See attached map for the identified key areas.
2. Compliance to the kind and class of livestock, scheduled move dates, and grazing period as identified in the Annual Operating Plan - The annual plan identifies what pastures are to be used in a given year, the length of grazing period, and when the livestock need to be removed to stay within the projected capacity. The permittee will be required to complete the livestock moves within 10 days. At no time will livestock use be extended in a unit unless prior permission is granted. Extension approval will be dependent on actual utilization assessment as compared to the established allowable for the pasture.

3. Rangeland Improvements - The permittee is involved as a cooperator in rangeland improvements and is responsible in maintaining all structural improvements once constructed. New construction will be assessed for compliance to standards as set forth in the permit modification. Maintenance of existing improvements is a requirement of the term permit. When improvements are inventoried not meeting standards the permittee will be notified, and a date agreed upon when the structure will be maintained.

B. Effectiveness monitoring relates to the prescriptions applied on the ground and whether or not they meet the goals and objectives as described in the AMP, and monitoring requirements as set forth on the Environmental Assessment.

1. Parker 3-Step monitoring points will be read in the year 2000 within the key areas to determine range and current ground cover conditions. At a minimum, existing range resource value ratings and ground cover conditions will be maintained at levels identified in Nevill (1994) report.

2. To some degree, the monitoring of utilization will denote the effectiveness of the permittees salting and herding program. Both practices are critical in maintaining utilization rates at or below the allowable.

3. At the completion of the range condition assessment, a three year production/utilization survey will be conducted to determine if the grazing permittee is accomplishing the assigned allowable use objectives.

C. Validation monitoring is conducted to determine if management actions are resolving the issues identified in the project level scoping. The three issues addressed include wildlife, range condition and trend, as well as economics. To accomplish this portion of the monitoring plan close coordination between the Game and Fish Department and the grazing permittee is a necessary component. The Game and Fish Department will need to provide the Forest Service their population estimates for the indicator species track in the analysis which includes, elk, deer, and antelope. This information will need to be provided, at a minimum, in the year 2000 when the key area clusters are inventoried. This analysis will demonstrate if the indicator species, deer, and antelope have increased in populations based on the anticipated improvement in range ecosystem diversity and capacity.

The annual operational plan will incorporate the standards set forth in this document into all activities which are scheduled for the allotment in that year. This will include the pasture rotation, scheduled deferment periods, allowable use, structural improvement work, range vegetation improvement work, and salting practices.

This plan will be in effect for the next ten years. However, after five years this plan will be reviewed, and a determination made as to its effectiveness in accomplishing the stated goals and objectives. If needed, additional analysis will be conducted and a new decision as well as amendment to this plan undertaken.

This plan is consistent with standards, guidelines, and management prescriptions as found in the Kaibab National Forest Plan.