

Allotment Management Plan

Bottle

USDA Forest Service
Verde Ranger District, Prescott National Forest
Yavapai County, Arizona

Introduction

The Bottle Allotment and the Goat Peak Unit (Pasture) of the Goat Peak Allotment is located on the Verde Ranger District of the Prescott National Forest and its southwest boundary is approximately 7 miles east of Dewey, Arizona, in the southwest portion of the Verde Ranger District and the allotment extends north to the top of Mingus Mountain nearly to the Mingus Mountain recreation area. The Goat Peak Unit is adjacent to the Bottle Allotment and borders the Powell Pasture in the vicinity of the town of Cherry. The Goat Peak Unit of the Goat Allotment is being analyzed because it is proposed to be merged with the Bottle Allotment. The Bottle Allotment contains approximately 23,577 USFS acres, with 8 pastures and the Goat Peak Unit of the Goat Peak Allotment contains approximately 2730 USFS acres. Together the two allotments contain approximately 26,306 acres and represent the analysis area for this analysis. Elevations run from 4,800 on the south end of the allotment near Crater Mountain to 7,800 feet on top of Mingus Mountain on the north end of the allotment. The topography of the allotment is mountainous in character; the top of Mingus is flat in appearance with a slight southern slope. There are steep cliffs on the east and south ridges broken by deep canyons on the south and west ridges, running southeasterly. From Black Canyon south, there are numerous deep canyons with steep slopes which are separated by high road ridges with outcroppings of rock along their edges. There are several small mesas on the southern portion of the allotment, east of the Bottle ranch headquarters and south of the town of Cherry.

Desired Condition & Resource Objectives

The desired conditions and resource objectives for resources and infrastructure on this grazing allotment, based on the Forest Plan and the work of the Interdisciplinary Analysis Team, include:

- rangeland management that can respond to local or national demands for livestock production while maintaining air, soil and water resources at or above minimum local, State or Federal standards (Forest Plan, pg. 11);
- range administration that provides for the maintenance of satisfactory rangeland management status with a static or upward apparent trend (Forest Plan, pg. 32);

- management of the grazing operations using a system that is responsive to changing climatic or environmental conditions;
- the maintenance of vegetation with mid- to high similarity to the potential natural plant community (PNC) providing for ecological functionality and resiliency following disturbance while sustaining long-term productivity of the land;
- the installation and maintenance of structural improvements, such as water-supply systems, that enhance management control and flexibility and allow for effective distribution of forage use;
- the control of noxious weeds which is managed under the Tri-Forest Noxious or Invasive Control Plan;
- the maintenance of soils in satisfactory condition over the long-term with improving conditions in areas departing from satisfactory condition;
- the maintenance of satisfactory conditions for water resources that meet total maximum daily load (TMDL) and other State water quality objectives;
- the maintenance of functioning spring-fed riparian systems, and saturated soils where potential exists, that support vegetation within site potential and provide habitat for riparian-dependent plants and animals while providing water sources for wildlife and livestock needs;
- the maintenance of fully functional riparian systems supported by herbaceous and multi-age woody vegetation, within site potential, that provides for geomorphically stable stream channels and banks and habitat for riparian-dependent plants and animals. Functional riparian systems support water quality and both hydrogeomorphic and biological attributes and processes;
- protection and preservation of important historic and cultural sites; and
- the maintenance of suitable habitats for Management Indicator Species, Migratory Bird Treaty Act species, federally Threatened and Endangered species, Forest Service Sensitive species, and for indigenous plant and animal species.

Grazing Management

A. Permitted Numbers, Season of Use, and Animal Months

Permittee	Permit Type	# of Livestock	Season of Use	Animal Months
Dave & Lu Ellen Statler	Term (10 years)	120 -220 (cow/calf)	Year-long	Ranging from 1,440 to 2,640 Animal- Unit- Months ¹

The period of grazing and the stocking numbers on NFS lands will be determined by monitoring, designated in the Annual Operating Instructions and authorized in the Bill for Collection.

¹ Animal-Unit-Month (AUM) is the amount of oven-dry forage required by one mature cow of about 1,000 pounds, either dry or with a calf up to six months of age, or their equivalent, for a standardized period of 30 animal-unit-days.

B. Grazing Management and Allowable Use

Grazing Management

Apply deferred rotation in the 9 main pastures. Defer using a pasture the same time of year every year.

Re-entry into a pasture will be allowed as part of the rotation following additional vegetation growth.

Allowable Use

Site	Utilization levels
Upland sites	Upland forage (growing season) – 31-40% Upland forage (non-growing season) – 41-50% Upland Browse – 50%
Riparian	Riparian Woody - 20% Riparian Herbaceous – 50%

The herbaceous plant utilization levels above represent the percentage of last season's growth, if grazed during the dormant season, or the percentage of the current season's growth, to date, if grazed during a growing period (relative or seasonal utilization).

Livestock grazing during the summer (warm-season, typically July -September), would be managed at Conservative (31-40%) use intensity on key herbaceous species identified within key areas on the allotment.

Livestock grazing prescribed use levels outside of the summer forage growing seasons would be managed at a Moderate (41-50%) use intensity on selected key herbaceous species within key areas on the allotment.

Livestock grazing prescribed use levels would be managed at Moderate (41-50%) use intensity on selected upland key browse species current leader growth at any given time during the year. 20% allowable use of current year's production on selected key riparian woody species (willow, cottonwood, ash and alder). These use prescriptions would apply at any time of the year that livestock are in the riparian area.

Application of standard management practices such as salting, herding, and controlling access to water to achieve proper distribution or lessen the impact on areas which are sensitive or are natural concentration areas will be applied by the permittee.

Protein, salt, and other supplements will not be placed within ¼ mile of water or any identified sensitive plant population. New improvements (e.g. pipelines, troughs, tanks, or fences) will be designed to avoid adverse impacts to any such populations.

Annual Operating Instructions will be prepared each year in cooperation with the permittee to allow for consideration of current allotment conditions and management objectives. This AOI will detail the current season's grazing schedule, the stocking level, the improvement maintenance needs, needed improvements, and the allowable use levels on key forage and browse species.

C. Rangeland Improvement Program

Adaptive management would allow for the construction of rangeland improvements if they have been identified and are determined, through monitoring, to be necessary for achieving resource objectives. However, if some or all improvements are not implemented, the upper limits of permitted livestock numbers may not be achievable. In addition to the structural improvements included above in site-specific resource protection measures, the following improvements are authorized for construction:

1. Install approximately 1 mile of 1¼" polyethylene pipe in the Holding, Walnut and Hayfield Pastures. Install 3 troughs at the ends of the pipelines and in the existing corral. Install a 5,000-gallon storage tank.
 2. Install ½-mile of fence to divide Holding Pasture.
 3. Clean and possibly deepen Ash Creek Well, install new steel casing, install solar pump. Construct a waterlot fence around Ash Creek well and a new water trough in the Powell Pasture.
 4. Reconstruct Uncle Sam well with windmill and fence to provide water for Slick Rock, Hayfield, Holding and Pine Pastures.
 5. Install approximately 3 miles of drift fence in the northwest portion of Burnt Canyon Pasture (from Mingus Springs Camp east to an existing holding pen and further northeast toward Gaddes Canyon).
- All new or reconstructed fencing will be built to accommodate wildlife passage using a 4-strand fence with a smooth bottom wire 18 inches off the ground and a total fence height of 42 inches or less.
 - All new or reconstructed water developments will include wildlife access and escape ramps.
 - Cooperation of the permittee will be sought to make stock water supplies available for wildlife needs during critical periods, if water is available at the sources (e.g. storage tank).
 - The permittee will ensure that structural range improvement maintenance is completed to standard; that livestock do not enter the allotment or a pasture prior to the approved entry date; that livestock are removed from pastures and the allotment as specified in the AOI;

and that livestock do not enter or re-enter pastures that either have already been grazed, or that are planned for rest.

¹ Travel Way – Any transportation facility that allows vehicle passage of any sort, that came into existence without plans, design or standard construction methods, that is not maintained or signed and has a very low traffic volume.

D. Maintenance Responsibility

Existing improvements are shown on the allotment map and range improvement inventory sheets of the permit.

All maintenance must be done annually whether the allotment is actually grazed or not.

Maintenance must occur throughout the season and cannot be a one time action.

Damage resulting from big game, wind, other acts of nature, or human caused actions, must be repaired in a timely manner so as to ensure the integrity of the structures.

All maintenance of exterior fences must be completed prior to turn on each year. *(It is the responsibility of the permittee to ensure that the necessary coordination occurs between adjacent allotments to ensure maintenance is completed in a timely manner).*

E. Drought Management

Perennial grasses and major browse species need deferment/rest in order to provide time to recover from drought induced stress.

Move cattle when utilization in pastures is met. If removal of livestock is necessary, they may be authorized to return to the allotment once conditions improve; meaning sufficient recovery from the effects of drought stress has occurred and there has been enough herbaceous production to support livestock numbers. Potential return of livestock will be evaluated no earlier than the summer growing season.

Monitoring and Evaluation

A. Implementation (Compliance) Monitoring

--- Periodic field checks will be conducted by the Forest Officer and/or the grazing permittee to measure forage use to determine if allowable use levels are being reached and determine any needed pasture movements.

(Monitoring of allowable use on key forage species in key areas is the joint responsibility of the Forest Service and the permittee. Although the Forest Service will make every effort to assist the permittee in ensuring compliance with standards, the permittee has the ultimate responsibility for ensuring that the allowable use standards are met).

--- Periodic field checks will be conducted by the Forest Officer to assess vegetation health and trends as well as soil function to identify needed adjustments in season of use and/or livestock numbers.

Field Checks will include informal inspections, formal inspections, and permittee compliance monitoring.

Informal Inspections

Informal inspections conducted by the Forest Officer will be made as the opportunity arises, such as when the Forest Officer is working in the area or is passing through the allotment.

The permittee will be notified by telephone of any significant observations needing immediate attention. Significant observations will be documented in writing by the Forest Officer and a copy of the inspection notes will be sent to the permittee in a timely manner.

Formal Inspections

Formal inspections conducted by the Forest Officer will be made as time and competing duties allow with an attempt to inspect each of the pastures.

The permittee will be requested to accompany the Forest Officer during the inspections. Significant findings from these inspections will be documented in a letter or inspection report sent to the permittee in a timely manner.

Permittee Compliance Monitoring

The permittee will:

- Monitor the allotment continuously throughout the grazing season to determine current resource conditions and to ensure the terms of the permit are being met.
- Document all findings through notes, photographs, or other means decipherable by the Forest Officer
- Share monitoring information with the Forest Officer, and
- Coordinate with the Forest Officer to resolve any problems that arise.

B. Effectiveness Monitoring

The permittee is encouraged to participate in any effectiveness (e.g. long term condition and trend) monitoring and evaluation conducted on the allotment.

Site specific Management Objectives for Soil Resources:

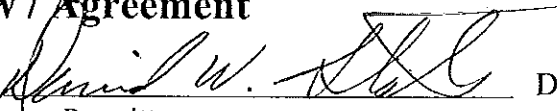
- In TES Map Unit 485 in the Holding pasture, detect an increase of litter in the interspaces between plants within 5 years.
- In TES Map Unit 490 in the Walnut pasture, detect progress towards an increase in percent and spatial distribution of vegetative ground cover, both vertical and horizontal, within 5-7 years.
- In TES Map Unit 438 in the Slick Rock pasture, detect improved soil condition in the inclusion burned with high severity within 10 years.

Site specific Management Objectives for the Riparian Resource:

- Ash Creek above Ash creek well- herbaceous vegetative cover along greenline with progress towards stability detectable within 2-3 years.
- Burnt Canyon – improve bank stability and increase recruitment of woody riparian vegetation with progress detectable within in 5 years.
- Ash creek within Walnut pasture – herbaceous vegetative cover along greenline with progress towards stability detectable within 2-3 years.

These objectives are expected to be achieve by limiting grazing intensity at impaired and unsatisfactory sites, through the application of site specific measures.

Permittee Review / Agreement

Reviewed by/ agreed to  Date 3-29-2012
 Permittee

Forest Officer Approval

Approved By  Date 3/29/2012
 Celeste Gordon, Verde District Ranger