

**CLIFTON RANGER DISTRICT
APACHE/SITGREAVES NATIONAL FOREST
ANNUAL OPERATING INSTRUCTIONS (AOI)**

Pigeon Allotment

2020 - 2021

I. PERMITTED USE:

The following table illustrates the number of livestock and season of use permitted on the Pigeon Allotment as per Term Grazing Permit # 030103023 issued to [REDACTED] on July 2, 2014.

KIND	CLASS	NUMBERS	AUM	SEASON OF USE
Cattle	Cow/Calf	499	7904	03/01 – 02/28
Horses	Horse/Mule	10	144	03/01 – 02/28

II. AUTHORIZED USE:

The following numbers and classes of livestock are authorized to graze on the Pigeon Allotment this year.

KIND	CLASS	NUMBERS	AUM	SEASON OF USE (grazing year)
Cattle	Cow/Calf	85	1346	03/01/20 to 02/28/2021
	Yearling	0		
	Bull	0		
	Total Head:	85		
Horse/Mule	Mature	2	29	03/01/20 to 02/28/2021

III. ROTATION SCHEDULE: Livestock use is authorized as follows as Forest Officer Instructions in the pasture rotation schedule. Deviations from this will be considered not in compliance and must be made in advance and amended in the AOI to remain in compliance with Forest Officer Instructions.

Actual dates may vary (+ or – 5 days) dependent on utilization levels, range conditions and time required moving livestock.

PASTURE	NUMBER	SEASON OF USE (calendar)	GRAZING INTENSITY	KEY AREA	KEY SPP
Hil/Spring Canyon (Nov 2019 to 4/15/2020)	85 cc	3/1/20 - 4/15/20	Conservative, 31 - 40%	C3, P5	BOCU, BOHL, BOGR
Pigeon	85 cc	4/16/20 - 8/31/20	Light, 0 - 30%	P2, C5, P1, CI	BOCU, BOHL, BOGR
Four Bar/Cow Canyon	85 cc	9/1/20 - 10/15/20	Light, 0 - 30%	C2, P7, Joe Tank Area	BOCU, BOHL, BOGR
Four Bar/Cow Canyon	85 cc	10/16/20 - 11/30/20	Light, 0 - 30%	TBD	BOCU, BOHL, BOGR
Pat Mesa Unit (Pat Mesa/Dog Flat/Sunflower)	85 cc	12/1/20 - 2/28/21	Conservative, 31 - 40%	C4, P4, C6, P8	BOCU, BOHL, BOGR
Chitty (for 2 weeks in April and/or Oct)		30 days total	Livestock working only		
Steer and Dry Farm (for 2 weeks in April and/or Nov)		30 days total	Livestock working only		
Turkey Creek Pasture		Incidental	With notification	TBD	CEMO, SHY

Livestock ingress and egress to the Pat Mesa Unit would be across Pigeon Creek via the Clear Creek Trail only. No Livestock will be trailed or moved along the corridor of Pigeon Creek, Bear Canyon or the Blue River. The Blue Trap will

continue to be excluded from grazing. Additionally, as stated in previous communication livestock will not be authorized access to graze a pasture if there is no guarantee that the improvements (fence, water, etc.) will support grazing activity without risk of livestock accessing areas not authorized.

Existing grazing rotation prescription developed through the January 31, 2003 San Francisco Group Biological Opinion:

Pasture or Unit	Season	Percent Use	Rotation Schedule
HL	Nov-April 15th	40%	2 year out of 3
Pat Mesa Unit: Dog Flat, Pat Mesa, Sunflower	Nov-April 15th	30-40%	1 year out of 2
Pigeon Pasture	April 15 th -July and Late growing season. (Sept)	25-30%	1 year out of 3
Cow Canyon/4-Bar	Spring Summer	25%	Defer during portion of growing season.
Steer & Dry Farm Traps	April & Nov	40%	2 weeks/month
Chitty Trap	April & October	40%	2 weeks/month
Turkey Creek	Winter Season	40%	Nov-April
WJ& Holding Traps	Winter		n/a
Horse	Deferred (Oct – May)	40%	n/a

DROUGHT CONTIGENCY (2209.13 11-14 R3 supplement 2013 19.1 Drought Guideline)

“The question for land managers is not *will* drought occur, but *are land managers prepared for drought?* Land managers and grazing permittees, must plan for drought as a normal part of management and business. The Standardized Precipitation Index (SPI) is a unit of measure that compares recent precipitation values for a period of interest with long term historical values to assess moisture conditions in a given area. In the Southwestern Region, anytime the SPI reaches a value of minus 1.00 or less for the preceeding 12 month period, grazing allotments should be evaluated for existing drought conditions.”

The District wants to be proactive and plan for drought like conditions and/or lacking stock water availability when those conditions materialize and incorporate into AOI grazing management and pasture rotation as much as possible.

IV. ALLOWABLE USE STANDARDS (Grazing Intensity)

Allowable use of forage is based on the amount and kind of forage on the allotment, plant needs, range condition, trend, and grazing management strategy. Duration, frequency, and timing may be manipulated within the grazing schedule to meet allowable use standards. Grazing intensity may be described in terms herbage removed during the grazing and/or growing period, or as a utilization level at the end of the growing period. Removal of leaf material, when the plant is actively growing can affect root growth which in turn affects future leaf growth. Sufficient leaf area is essential to support plant functions through photosynthesis.

The allowable use levels for this allotment are established for key areas and key species by pasture for the time period livestock are in a pasture. The use on key species in key areas should be used as a trigger the length of the grazing period in each pasture. The establishment of the utilization standards is consistent with 36 CFR 222 regulations, FSM 2210 and 2230, and FSH 2209.21.

For simplicity, key areas are generally considered as follows: 1) full capacity rangeland located on ridgetops/mesas within a ¼ mile from available water sources; 2) canyon bottoms/riparian areas with free flowing water or springs regardless of distance from water; 3) any area containing full capacity range with erosive soils and insufficient/marginal ground cover to protect the soil; or 4) areas containing habitat, whether occupied, suitable and unoccupied, or potentially suitable habitat, for threatened, endangered, or proposed species that are of concern to the Forest Service.

Key areas should be designated in cooperation with the Forest Service and the permittee.

Grazing Intensity is discussed by Holechek and others (Holechek, Jerry L., Rex D. Pieper, and Carlton H. Herbel. 2004. Range Management, Principles & Practices. Prentice Hall, page 248):

Table 3. Qualitative characteristics of grazing intensity categories used to characterize New Mexico rangelands (Holechek & Galt, 6/00, Rangelands).

Qualitative Grazing Intensity Category	Use of Forage by Weight	Qualitative Indicators of Grazing Intensity
Light to non-use	0-30	Only choice plants (key species) and areas show use. There is no use of poor forage plants
Conservative	31-40	Choice forage plants (key species) have abundant seed stalks; Areas more than a mile from water show little use; About one third to one half primary forage plants show grazing on key areas.
Moderate	41-50	Most of accessible range show use; Key areas show patchy appearance with one half to two thirds of primary forage plants (key species) showing use; Grazing is noticeable 1-1½ miles from water
Heavy	51-60	Nearly all primary forage plants show grazing on key areas; Palatable shrubs show hedging; Key areas show a lack of seed stalks; Grazing is noticeable in areas over 1½ miles from water
Severe	61+	Key areas show a clipped or mowed appearance (no stubble ht.); Shrubs are severely hedged; There is evidence of livestock trailing to forage; Areas over 1½ miles from water lack stubble height.

V. ADMINISTRATION

1. The permittee will record actual use as it occurs; including livestock numbers and dates your permitted livestock are in a pasture. This information will be reported at the next annual validation meeting.
2. Any change or deviation from this Annual Operating Instructions is to be coordinated and confirmed in advance with the District in an AOI amendment. Additionally, as per terms and conditions of the grazing permit, the permittee shall

provide 5 days' notice of moving livestock on or off the allotment. Credit or refunds generated are based upon this documentation. If emergency conditions require making a change immediately, the permittee will notify the District as soon as practical.

3. Livestock remaining in pastures beyond the specified rotation date, that are allowed to drift between pastures, or grazing in rested pastures may be considered a violation of your Term Grazing Permit.
4. Livestock should be moved when forage utilization objectives have been met or within 1 week of planned rotation dates, unless changes have been confirmed with District Range personnel.
5. The District may spot check range improvements before the entry date to insure improvements are in a satisfactory condition. Livestock will not be allowed to enter pastures if assigned improvements are not maintained to proper standards. Livestock are not allowed to enter pastures if fences will not keep livestock where they are placed.

VI. SALT AND MINERAL BLOCK

Typically, salt or mineral blocks are not to be placed within a quarter mile of water or drainage bottoms. With District Ranger approval, salt may be placed closer than a quarter of a mile to water for specific purposes. Salt will be used to attract cattle to areas of a pasture typically not utilized and or for soil/range condition treatment purposes. Blocks may be removed by the District if found near water, over-utilized areas, meadow bottoms or roads. Feeding and/or supplements such as molasses are not authorized, unless on a case by case for specific purposes and approved by the District Ranger.

VII. MONITORING

Monitoring and evaluation is an essential aspect of good rangeland management. Monitoring and evaluation can be described as the gathering of information so the manager knows what is happening to rangeland resources and why. The intent of monitoring and evaluation is to test the success of the management strategy and if needed, make adjustments. The following types of monitoring can be collected and will be used by the Forest Service for management decisions.

1. Forage Production
2. Forage Utilization/ Stubble Height measurements.
3. Photo Points
4. Condition of Improvements
5. Actual Use
6. Grazing Response Index
7. Precipitation.

VIII. RANGE IMPROVEMENT CONSTRUCTION / MAINTENANCE

The permittee will maintain all range improvements that are assigned for maintenance on pages 11 – 14 of the Term Grazing Permit. Reconstruction or new improvements requires written authorization by the District Ranger through a Permit Modification. When improvements are completed the permittee will inform District Range personnel to schedule an inspection. Before using machinery to clean any pond within defined wildlife habitat, the permittee is required to give the District Office at least 45 days advance notice so that the tank can be inspected for threatened or endangered species. All work involving the use of heavy equipment will be accomplished only after prior approval of the District Ranger.

The following table can be addressed in pen and ink as improvements are developed and copies be added to 2240 files.

Current Year Improvement Scheduled		YEAR	2020	Status
Improvement Type / ID #	Completion Date	Description/Comments		Done /Date

IX. PROTECTION

The permittee, his agents and employees, when acting within the scope of their employment, and his contractors and subcontractors will protect the land and property of the United States, waived private land and other land under jurisdiction of the Forest Service covered by and used in conjunction with this permit. Protection will include taking all reasonable precautions to prevent, make diligent efforts to suppress and report promptly all fires on or endangering such land and property. During periods of high fire danger, branding fires will be allowed by permit only.

X. ALLOTMENT INSPECTIONS

Forest personnel may conduct periodic brief inspections of pastures within the allotment at any time to verify actual use, improvement conditions, or other non-range related activity. The permittee will be notified and invited to participate on extended (3-5 days) inspections.

Planned inspections for Grazing Year 2020 (captured in field reports added to 2210 files):

Pasture	When	Location

Notes:

XI. PERMIT CONDITIONS

This Annual Operating Instructions is hereby made a part of the Term Grazing Permit as provided for in Part 2, Section 8(a). It complies with the standards and guidelines found in the Forest Plan.

Failure to comply with **any** of the terms and conditions specified in Parts 1, 2, and 3 of your Term Grazing Permit may result in suspension or cancellation, in whole or in part, after written notice. This is found in Part 1, Section 3, of your permit.

PERMITTEE

Ed Holby Jr

DISTRICT RANGER

DATE

2-25-2020

DATE

Appendix: 92.14b – Describing Grazing Intensity (FSH 2209.13 – GRAZING PERMIT ADMINISTRATION HANDBOOK CHAPTER 90 – RANGELAND MANAGEMENT DECISIONMAKING.

Grazing intensity may be described in terms herbage removed during the grazing and/or growing period, or as a utilization level at the end of the growing period. It is important to clearly define how intensity is being viewed and described. Removal of leaf material, when the plant is actively growing can affect root growth which in turn affects future leaf growth. Sufficient leaf area is essential to support plant functions through photosynthesis. Heavy to severe intensity or utilization can affect current plant development and growth, as well as growth during subsequent growing seasons.

Grazing Intensity is discussed by Holechek and others (Holechek, Jerry L., Rex D. Pieper, and Carlton H. Herbel. 2004. Range Management, Principles & Practices. Prentice Hall, page 248):

Grazing Intensity as depicted as a utilization level at the end of the growing season as discussed by Holechek and Galt (Holechek, Jerry L. and Dee Galt. 2000. Grazing Intensity Guidelines. *Rangelands* 22(3): 11-14):

Light to non-use	0-30 percent
Conservative	31-40 percent
Moderate	41-50 percent
Heavy	51-60 percent
Severe	61+ percent

Qualitative Grazing Intensity Category	Use of Forage by Weight	Stubble Height Guide		Forage Residue Guide ¹
		Blue Grass	Western Wheatgrass	
	(%)	--- Inches---		(lbs/acre)
Light to non-use	0-30	2.5+	7.0+	435+
Conservative	31-40	2.0-2.5	4.0-5.0	350-435
Moderate	41-50	1.5-2.0	3.0-4.0	265-350
Heavy	51-60	1.0-1.5	2.0-3.0	180-265
Severe	>60	<1.0	<2.0	<180

¹We have found residue guidelines developed by Bement (1999) for blue grass rangelands in Colorado apply well to New Mexico blue grass rangelands.

Qualitative Grazing Intensity Category	Use of Forage by Weight	Stubble Height Guide				
		Black Grass	Droopseed	Threecorn	Tobosa	Sageston Sideoats Grass
	(%)	--- Inches---				
Light to non-use	0-30	5+	9+	5+	9+	16+
Conservative	31-40	4-5	8-9	4-5	7-9	13-16
Moderate	41-50	3-4	6-8	3-4	5-7	12-14
Heavy	51-60	2-3	4-6	2-3	3-5	10-12
Severe	>60	<2	<4	<2	<3	<10

Qualitative Grazing Intensity Category	Use of Forage by Weight	Stubble Height Guide				
		Arizona Fescue	Western Wheatgrass	Intermediate Wheatgrass	Mutton grass & Kentucky Bluegrass	Mountain Mully
Light to non-use	0-33	8+	7+	5+	5+	5+
Conservative	33-40	6-7	4-5	3-4	4-5	4-5
Moderate	41-50	5-6	3-4	2-3	3-4	3-4
Heavy	51-60	4-5	2-3	1-2	2-3	2-3
Severe	> 60	< 4	< 2	< 1	< 2	< 2

SOILS:

Where "impaired soils" exist and soil loss exceeds the tolerance soil loss; potential capacity (PC), those acres will not be counted toward an estimated carrying capacity unless under intensive management. See FSH 2209.21, Sec 21, 23 and 53.3-1e for details. Additionally, where we find "unstable soils" and natural soil loss exceeds tolerance; no capacity (NC) and knowing these soils cannot be used without causing long term resource damage, these acres cannot be counted toward potential carrying capacity either. See FSH 2209.21, Sec 21, 23.3.

DISTANCE TO WATER:

Reduction in Cattle Grazing Capacity for Distance to Water

Miles	Grazing Capacity Reduction
0-1	None
1-2	50%
2 - <	Considered 100% Ungrazable

STEEPNESS OF SLOPE:

Reduction in Cattle Grazing Capacity for Different Percentage of Slope

Percent Slope	Grazing Capacity Reduction
1 - 10%	None
11 - 30%	30%
31 - 60%	60%
60% and <	Considered 100% Ungrazable

LIVESTOCK FORAGE CONSUMPTION:

Daily and Monthly Forage Intake (Dry Matter Equivalent) Needs of Dry Cow and Cow/Calf Pair

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Days/mo	31	29	31	30	31	30	31	31	30	31	30	31
lbs/day dry	17	17	17	17	17	17	17	17	17	17	17	17
lbs/mo dry	527	493	527	510	527	510	527	527	510	527	510	527
lbs/day c/c				29	29	29	29	29	29	29		
lbs/mo c/c	527	493	527	870	899	870	899	899	870	899	510	527

PROPER FORAGE USE AND RANGE CONDITION:

Proper forage use is the degree of grazing use plus trampling and spoilage that individual species can sustain while maintaining vigor, forage production and reproductive capacity of the plant. Allowable use is determined from proper use and is the level of grazing use that can be permitted on an area when all influencing factors are considered. Allowable use values are a tool to improve range health and plant vigor.

Range condition is based upon the latest range analysis data. Much of what we have is old with regard to the large amounts of data. However, we are actively collecting monitoring data to determine a comparison to the older data. Range condition classifications will be determined on a site by site basis during field reviews to check the on-the-ground forage production estimates.

Notes for next year-