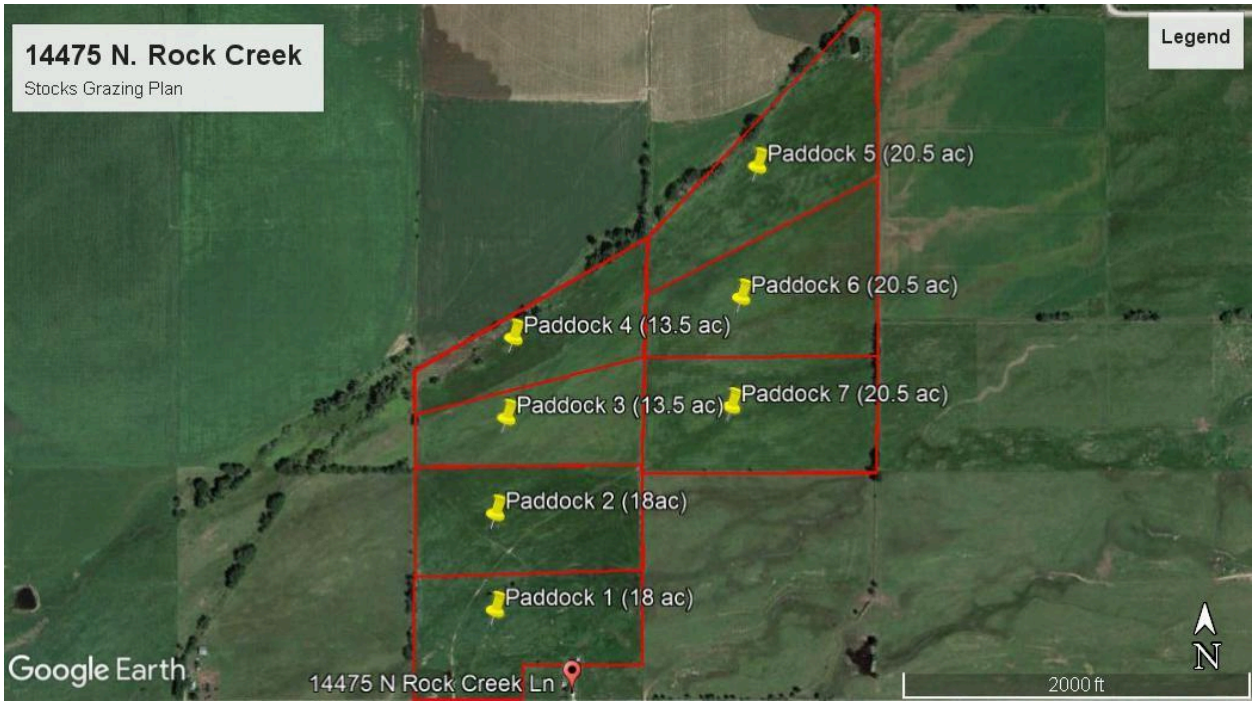
Prescribed Grazing Plan

Goals and Objectives

We will apply managed grazing on a continuing basis according to our management goals, making adjustments as needed to ensure that the objectives of the prescribed grazing plan are met. Adjustments may include all or part of: (a) changing the length of grazing and rest periods; (b) changing paddock sizes; (c) moving watering facilities; and/or (d) moving access or travel lanes. Following this plan will conserve and sustain the soil, water, air, plants and animals of the grazed land. This system plan will maintain vegetative cover to prevent soil compaction and soil erosion from wind and water. Implementing this plan will reduce labor and inputs. This should improve our financial condition. The plan will address the existing and needed forages (forage balance), supplemental forage feed (if needed), the grazing schedule needed, fencing required, water requirements of the system, nutrients and their management of the system and the winter management of the livestock.

Map



Inventory

There are 50 head of cattle on this operation. There are 125 acres of pasture available. The grazing season is planned to average at least 4 months, or 120 days, weather permitting.

Forage Inventory

The pasture consists primarily of Orchard grass, which produces between 7,000 and 8,000 lb./ac annually. Similarly, the dry matter of orchard grass is approximately 200 lb. per acre inch. For this project, I am assuming that animals will not start on grass less than 8" long. Animals will be removed by 3". Thus, the dry matter will be (5")(200)(1.05 buffer) = 1,050 lb. per 5 acre inches.

Forage/Animal Balance

The planned acreage available for pasture is 125 acres. The planned stocking rate for this location is 50 head beef cattle(pairs). This computes to 2.5 ac/cow. The stocking density will range from 4,444 lb./acre on the smaller paddocks to 2,927 lb./acre on the larger paddocks. All information is derived from Table 1 below. This table was developed "on-ranch" using the paper "How much Pasture do I have, and how long will it feed my cows?" written by Ray Smith, Forage Extension Specialist from the University of Kansas. In the future, additional paddocks may be added to achieve higher desired stocking densities.

Prescribed Grazing Plan Data and Analysis							
Dry Matter density per acre inch. (base on cover)					Effect of grazing system on forage utilization		
Density Category	<75%	75-90%	>90%		System	Utilization	
Tall Fescue/Orchardgrass	50-150	150-200	200-300		Continuous	30-40%	
Bluegrass	50-100	100-175	175-250		Slow rotation (3-4 paddock	40-55%	
Cool-season grass-clover	50-125	125-200	200-275		Fast Rotation (7+ paddocks)	55-70%	
Bermudagrass	100-200	200-300	300-400				
Alfalfa	75-150	150-225	225-300		Livestock	Dry Matter (% bw)	
Red clover	75-125	125-175	175-250		Dry beef cow	0.020%	
assume 5"/acre consumption (8"-3")					Lactating beef cow	0.035%	
Input values					Stockers	0.030%	
# (headcount)	50				Sheep and goats	0.040%	
Weight (average)	1200						
DM% (% of body weight)	0.04			Paddock Size	15	acres	
days	4			# cows to utilize available forage	50	cows	
DM/acre	1050			Days Grazing	4	days	
% utilization	0.6						
acres	125						
				# Cows to utilize available forage			
Formulas				((DM/acre)(acres)(% utilization))/((weight)(DM%)(days))			
Paddock Size				Days Grazing			
((weight)(DM%)(#)(days))/((DM/acre)(% utilization))				((DM/acre)(acres)(% utilization))/((weight)(DM%)(#))			

Table 1

Grazing Plan

In accordance to the above-described requirements, the anticipated livestock rotation will be as follows:

- Paddock 1 – 4 days
- Paddock 2 – 4 days
- Paddock 3 – 3 days
- Paddock 4 – 3 days
- Paddock 5 – 5 days
- Paddock 6 – 5 days
- Paddock 7 – 5 days

When grazing conditions are very wet, we will follow the Mud Contingency Plan.

Monitoring Plan

The Key Forages will be monitored by weekly observation to note negative changes in species composition, density, diversity or yield beyond weather causes.

Mud Contingency Plan:

During periods of excessive rainfall when mud is a problem the manager will:

- Rotate the livestock through the grazing system at a “faster” than normal pace OR
- put the livestock in a “sacrifice” paddock of favorable soil type to take the brunt of the abuse to allow other paddocks a chance to avoid damage OR
- change the schedule to avoid muddy situations

There may be situations where all three of the above will be implemented during a long, wet period.

Drought Contingency Plan:

During periods of drought when forage production is low or none at all the livestock manager will:

- reduce herd size or increase paddock size OR
- rotate the livestock through the grazing system at a “slower” than normal pace OR
- put the livestock in a “sacrifice” paddock to take the abuse while other paddocks rest and avoid damage OR
- feed a supplemental forage supply such as hay

There may be situations when a long drought will require all of the above to be implemented.

Fencing

Permanent perimeter fences enclose the property. To separate paddocks, we will use electrical fencing. There will be a minimum of 7 paddock. Additional fencing may be used to further separate the paddocks for improved utilization and stocking density.

Watering Systems:

The watering system consists of 2,300' of 2" 160 PSI HDPE pipe. 3 – 45-gallon frost free troughs will be installed at intervals. The water source is a 6", 100 foot deep well capable of a minimum of 10 gallons per minute. The winter watering system will be the same. The watering system existing is adequate to facilitate the prescribed grazing system and the watering system has been designed and/or installed to NRCS standards and specifications.

Manure and Nutrient Management:

Soil testing will be done in 10 -20-acre segments unless larger portions of the grazed land consist of identical soils, These soil tests will be done once every 3 years.

Implementing all of the components of this Prescribed Grazing Plan will enhance nutrient cycling by appropriate manure distribution and nutrient uptake. The contingency plans and winter management of the livestock will be followed as watering facilities and forage feeding areas remain in similar location(s).

Winter Management:

Winter Management of Livestock will consist of continued use of the paddocks by moving hay bunks within a single paddock. Winter feeding paddock will be determined annually.

Water Quality:

There are no riparian areas to manage around. Water for drinking will be continually supplied by the well and frost-free troughs. During spring run-off, there will be brief period where irrigation water will flow through diversion ditches that may overlap with cattle grazing at the same time.

Refer to the map for locations of practices. For a schedule of when practices are going to be installed refer to the conservation plan schedule of operations.

Signature of Conservation Planner

Signature of Livestock Manager