



Put your plan to pasture.

# Arkansas Grazing Lands Coalition and the Grazing Lands Conservation Initiative

The Arkansas Grazing Lands Coalition (AGLC) is a non-profit organization working to further the goals of the Grazing Lands Conservation Initiative (GLCI), a nationwide collaborative process of individuals, organizations, and agencies working together to maintain and improve the management, productivity, and health of the Nation's privately-owned grazing land.

Through GLCI, cooperating organizations identify priority issues, find solutions, and create change on private grazing land. It provides a basis for coordination between units of government, institutions of higher education, producer organizations, and individuals. The initiative was designed to complement and enhance existing conservation programs providing technical assistance, education, and research.

The GLCI is a producer-initiated and producer-led effort, implemented through local coalitions supported by livestock producer organizations, scientific and professional grazing resource organizations, conservation and environmental groups, state and federal agencies, and other interested groups.

AGLC is pleased to be involved in implementing the Gazing Lands Conservation Initiative in Arkansas. For more about AGLC, visit www.argrazinglandscoaltion.org.

The 2024 Grazing Planner was funded by an agreement with the Arkansas Natural Resources Conservation Service.

If you are interested in being associated with the Arkansas Grazing Lands Coalition (AGLC) or in working collectively on a grant for grazing education, please contact Matt Flynt, AGLC Board Chairman at (479) 393-9085. AGLC is a 501 (C)(3) organization.

#### CHAIRMAN'S LETTER

On behalf of your AGLC Board of Directors, I would like to welcome you to the 2024 AGLC Grazing Planner and invite you to use this planner to outline your grazing goals for the year. Hang on to this planner and refer back to it often over the next 12 months. Not only was this planner designed to be a useful tool, it is also meant to be a handy reference. Jot down notes to remind you of tips or challenges that will be helpful when planning for the following year and use it to track your progress and success over the course of several years. Having guideposts are important in visualizing our success. This planner is designed to do just that, mapping your grazing journey from year to year.

In this year's Grazing Planner, you will find all the key elements needed to outline a grazing plan that will take your operation to the next level. The following pages will take you step by step to building a grazing plan that will help you to acheive your goals and set you up for future success.

From all of us at AGLC, good luck this year in all your grazing efforts!

Matt Flynt

AGLC Chairman

# **Grazing Principles & Planning Guidelines**

Livestock producers can achieve the most effective results from their grazing programs by adhering to four primary principles. A grazing plan built with these basic ideas in mind will have a solid foundation for success.

### **The Four Principles of Grazing:**

**Balance** forage supply and stock demand (stocking rate)

**Distribute** grazing pressure across your pasture

**Provide** rest for pasture plants during growing season

Avoid grazing during sensitive periods of time

Adhering to these principles will result in many benefits that will continue to enhance a producer's grazing program. These benefits will help producers:

- Achieve greater forage productivity
- Ensure stand longevity
- Sustain healthier plants
- Conserve water
- Protect soils

### How to Use this Planner:

This planner will allow you to take stock of your current grazing resources, develop an effective grazing plan for the coming season, help track your plan's progress, and evaluate the overall success of your plan.

The first step is to jot down your grazing goals for the coming year. This will serve as a guide post to help you develop a plan that meets your operation's needs. Next, complete the Grazing Resource Inventory on the following pages to understand what resources are currently available to you.

Once you have completed your inventory, use the grazing plan template to write down your plan details. This will help you make intentional steps toward your grazing goals and keep you on track throughout the grazing season.

This planner includes a 12-month calendar with helpful tips and information on topics related to effective grazing management. Review these materials before starting on your plan to ensure all relevant considerations have been made.

For more resources on grazing management or for technical assistance, contact your AGLC or NRCS representative today.

## Grazing Resource Inventory

# Map

Use the grid below to skech out your pasture. Identify any sensitive areas, water sources, fence perimeters, etc. Notice any problematic areas? You may want to include some land improvements in your goals. (\*Sensitive Areas are defined as riparian, erodable, etc.)



Use this space to write down your grazing goals for this year.

# Livestock Summary

Use the grid below to calculate your herd's forage requirements for the year. This will help you understand how many animals you can currently support. If you would like to support more livestock, make that one of your goals for this year.

				Livestock Requirements Per Month											
Kind/Class Livestock	Number of Animals	Average Weight	Daily Intake Rate	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Dry Cows	50	1,200 lbs.	2%	37,200 lbs	•										
TO	TALS														

#### **\*INTAKE RATE**

Stocker: 2.5-3.5% Horse: 2-3% Sheep/Goat: 3.5-4% Dry Cow: 2% Lactating Cow: 3-4% Dairy Cow: 2.5-3.5%

#### \*Intake Rate for the purposes of this planner is based on an animal's body weight and all calculations based on dry matter.

#### \*Calculation Tip:

#### **Daily Forage Requirement**

(# of animals) x (average weight) x (daily intake rate) = daily forage requirement

#### **Monthly Forage Requirement**

(daily forage requirement) x (# of days per month) = monthly forage requirement

# **Grassland Condition**

# Trend

Use the grid below to calculate and track the current quality of your forages. This information will help in developing your grazing plan. Quality not where you want it? Consider adding forage quality improvement to your goals.

		Field #												
		Acres												
		Month & Year	M_Y_											
Category	Score		Value											
1) Species Composition	Undesirable	Desirable												
-/	0 1 2	3 4 5												
2) Plant Diversity	Narrow	Broad												
-,,	0 1 2	3 4 5												
3) Plant Density	Sparse	Dense												
-1	0 1 2	3 4 5												
4) Plant Vigor	Weak	Strong												
		3 4 5												
5) Legumes & Stand	<10% 30%	Excessive												
	0 3 5	3 0												
6) Plant Residue	Deficient Optimize													
	0 3 5	3 0												
7) Uniformity of Use	Spotty Intermed													
		3 4 5												
8) Severity of Use	Heavy Modera	-												
		3 4 5												
9) Woody Canopy	>40%	<10% 3 4 5												
10) Soil Erosion	Severe Modera 0 1 2	te Slight 3 4 5												
		5 4 J												

**Be Advised:** As it relates to Category 5) Legumes & Stand, anything over 30% can potentially cause your livestock to bloat.

## Grazing Resource Inventory

# Forage Summary

Forages that are in good condition will produce more feed than forages that are in poor condition. Use this worksheet to assess changes in the condition of the overall pasture. An initial determination followed by annual monitoring will provide insight into the overall productivity changes. This evaluation should be done in the same area of the pasture and at the same time of the year each time to make the results meaningful.

					Forage Supply Per Month											
Field	Kind of Forage	Yield/Acre	Acres	Total Yield	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
i.	Tall Fescue	6,000 lbs.	50	300,000 lbs	•		24,000	72,000	84,000	45,000			15,000	36,000	24,000	
ii.	Bermudagrass	10,000 lbs.	25	250,000 lbs				5,000	12,500	62,500	75,000	50,000	32,500	12,500		
iii.	Crabgrass	4,000 lbs.	20	80,000 lbs.					8,000	16,000	32,000	24,000				

\*Annual forage production is greatly impacted by annual rainfall, fertilization and management.

## Grazing Resource Inventory

# Paddock Design & Layout

Use the grid below to skech out your pasture. Identify any sensitive areas, water sources, fence perimeters, etc.

A Word on Shade: Summer heat can be particularly brutal in Arkansas. If your fields are void of trees or other cover, be sure to consider how you will provide your herd with shade when the heat index peaks.



Sensitive Areas	
Livestock Summary	
Fencing System	
Watering System	
Heavy Use Areas	
Forages	
Grazing System	

## Record Keeping Best Practices

Keeping accurate records is a continual process in effective pasture management. You may also want to keep informal records of livestock type and number, forage height on the dates in and out of each paddock, and any other comments that may help trigger your memory in the future. This will help you track conditions of pastures and effectively manage each paddock over the long term.

In addition to keeping good pasture records, it's important to accurately track other elements that factor into the effectiveness of your grazing program. Below is a list of activities that may be used to complement your grazing records and help provide a complete picture of your operation.

#### 1. Test Your Soil Regularly

Don't wait to test your soil when issues arise. Get into the routine of testing your soil every three years to ensure problematic changes developing in your soil are caught and addressed early.

#### 2. Know Your Soil Types and How to Leverage Them

Knowing what soil types you have and where they are in your pasture is key to knowing what kind of forage and fertilization to apply and where to apply them.

#### 3. Take Account of What Forages You Have

Identify the major forages found in your pasture to understand how you can best support their propogation. Likewise, identify what weeds you have to understand how you can best suppress them.

#### 4. Evaluate Pasture Growth Weekly

Scout your pastures on a weekly basis to identify potential concerns early. Is lack of moisture taking a toll on forage growth? Are weed problems developing? Any insect or disease issues? Discovering issues like these sooner rather than later will be to your advantage.

#### 5. Analyze Your Forage Quality Regularly

Testing for and keeping record of the nutrient composition of the forages you produce will help you understand whether or not your efforts are improving overall forage quality from year to year. Use your records to adjust your efforts as necessary to achieve your desired results.

#### 6. Track Livestock Movement

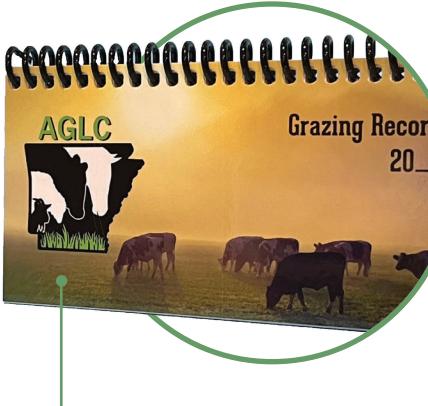
Record each time you move animals to a different paddock to compare with your rotations in the past or future. Doing this will give you insight and a historical perspective on how your operation is performing.

#### 7. Track Livestock Performance

Local Extension Service offices, veterinarians and others can assist you to develop and use a livestock record keeping system.

Check out the Grazing Plan Evaluation toward the back of this planner to understand what metrics you should be looking for as you begin to outline your Grazing Plan for this year. Be sure to take note of...

- 1. The current condition of your forages
- 2. The current condition of your soils
- 3. The current condition of your watercourses
- 4. The current condition of your local bird populations
- 5. Beginning & Ending Grazing Heights



 Keep your records up to date with an official AGLC Grazing Record Book.
 Request yours today by contacting your
 AGLC representative. Flip to the back cover for AGLC contact information.

## **JANUARY 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	<b>15</b> Early Bird Pre-Registration for Arkansas Grazing Conference Opens	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	PRO TIP: Avoid fe excess n PRO TIP: Monitor	y on poor soils to concentrat g organic matter and fertility. eding hay near streams and utrient from manure and pro the body condition of livesto o on-farm management goals	ponds, controlling stecting water quality. sck.

## Grazing Management Systems

### Continuous Grazing

Continuous grazing is a one-pasture system where livestock have unrestricted access throughout the grazing season.

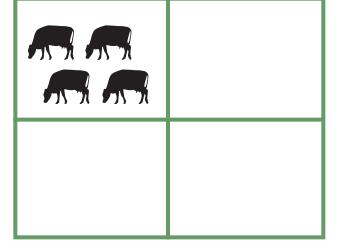
#### **Advantages**

- Requires less management
- Capital costs are minimal

#### **Disadvantages**

- Lower forage guality and yields
- Lower stocking rate and less forage produced per acre
- Uneven pasture use
- Greater forage losses due to trampling
- Animal manure is distributed unevenly
- Weeds and other undesirable plants may be a problem

### Simple Rotational Grazing Intensive Rotational Grazing



Simple rotational grazing is a system with more than one pasture in which livestock are moved to allow for periods of grazing and rest for forages.

#### **Advantages**

- Increased forage production and improve pasture condition over continuous grazing
- Reduces selective grazing
- Allows pastures to rest and allows for forage rearowth
- Can provide a longer grazing season, reducing the need for feeding harvested forages
- Better distribution of manure throughout the pasture

#### Disadvantages

- Costs for fencing and water systems can be higher than with continuous grazing
- Forage production and pasture utilization is not as high as intensive rotational grazing systems

Intensive rotational grazing is a system with many pastures, sometimes referred to as paddocks. Livestock are moved frequently from paddock to paddock based on forage growth and utilization.

#### **Advantages**

- Highest forage production and use per acre
- Minimizes selective grazing
- Stocking rates can typically be increased
- More even distribution of manure throughout the paddocks
- Weeds and brush are usually controlled through grazing
- Provides more grazing options and reduces the need for mechanically harvested forages

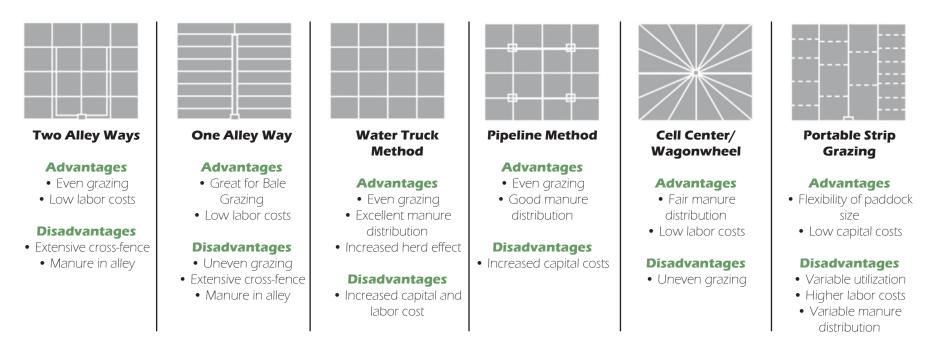
#### **Disadvantages**

- Requires careful monitoring of forage supply
- Initial costs may be higher due to fencing materials and water distribution systems
- Requires more management

## **FEBRUARY 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		ds that typically have less void excessive treading a	1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	<b>29</b> Early Bird Pre-Registration for Arkansas Grazing Conference Ends		

## Pasture Layout & Design



#### The layout of your pasture and paddocks can be a significant contributor to the overall success of your grazing plan. Below are a few tips to help you maximize the effectiveness of your pasture design and layout.

- 1. Keep livestock travel distance to water less than 800 feet.
- 2. Try to have water in each pasture instead of utilizing alleys for livestock to drink.
- 3. Square pastures require less fancing, reduce distance to water, and improves utliization rates compared to long, rectangular pastures.
- 4. Pasture size should be based upon grazing capacity not acres.
- 5. Cross fence based upon soil productivity, landscape features, and/or plant community.
- 6. Identify areas where temporary electric fence can be effectively used.
- 7. Temporary watering tanks can provide increased flexibility.
- 8. Be careful not to limit livestock access to shade.
- 9. Request aerial maps from NRCS, FSA, or the local Conservation District to plan before installing fence or watering facilities.

## **MARCH 2024**

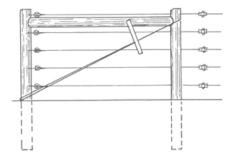
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>PRO TIP:</b> Allow sm root systems before gra	hall grain forages to reach a r zing. Do not graze these fora	ninimum height of 8-inches a ages less than 3-inches for op	and annual ryegrass 6-inche timum re-growth.	s to develop adequate	1	2
<b>PRO TIP:</b> Monito	or cool season weed grov	wth.				
<b>PRO TIP:</b> Feed ca	ttle magnesium supplements					
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24/31	25 Arkansas Graz-	26	27	28	29	30
	ing Conference Pre-Registration Deadline			Arkansas Grazing Conference - Hope	Arkansas Grazing Conference - Harrison	

## Fencing Systems

Permanent fences are used for the perimeters of pasture systems, livestock corrals, and handling facilities. Sometimes they are used to subdivide pastures into paddocks.

#### Permanent Fences

### High Tensile Wire Fences



This is a relatively new type of fence, which has become increasingly popular in recent years. Typically perimeter fences are 4-6 strands of wire and interior fences are 1-2 strands of wire.

#### Advantages

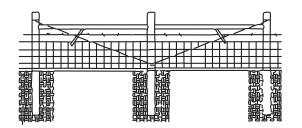
- Relatively easy to install and maintain.
- Can be powered to provide a psychological as well as physical barrier.
- Several contractors available to do installation.
- Relatively low cost.

#### Disadvantages

• Fences with several strands of wire are not easily moved.

Visit the AGLC website to check out our **Fencing System Tutorial Video!** 

### Woven Wire Fences



Woven wire is a traditional type of fence. It is used primarily for hogs and sheep. Woven wire fences normally have one or two strands of barbed wire installed above the woven wire.

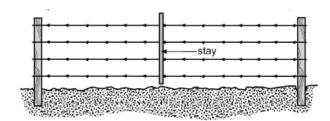
#### **Advantages**

- Not dependent on electrical power. Is useful in remote locations.
- Provides barrier for smaller kinds of livestock (sheep, hogs).

#### Disadvantages

- Cannot be powered, provides only a physical barrier.
- Requires much labor to install, most expensive.
- Not easily moved.
- Weed and vegetative growth promotes snow piling.

### Barbed Wire Fences



Barbed wire is a traditional type of fence, which is still quite popular. Barbed wire fences should be at least 4 strands for perimeter fences. When used for interior fences, they are typically 3 or 4 strands. Barbed wire should never be electrified because of greater potential for animal injury.

#### Advantages

- Not dependent upon electrical power, thus is useful in remote areas.
- Most producers are experienced with construction of barbed wire fences.
- Reasonably cost-efficient.

#### **Disadvantages**

- Not easily moved.
- Provides only a physical barrier.

#### **Temporary Fences**

While permanent fencing is most commonly used to create perimeters, the primary uses of temporary fence are to define interior paddocks within a pasture system, direct the grazing within a paddock to areas that are being underutilized, and to fence in areas that are grazed only occasionally or not part of a regularly-rotated pasture system. Temporary fences are usually constructed with step-in posts, polywire and require an electrical source. Easy and quick to move, these fences do not require tools for setup, nor do they require bracing. **Single-wire high tensile fencing is a great way to spread electricity across your field(s) with minimal materials and effort.** 

## **APRIL 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
	15	10		10	17	20
21	22	23	24	25	26	27
28	29	30	<b>PRO TIP:</b> Close ga adequat	ates and keep cattle off re te root development and	ecently seeded forage, g d vegetative top growth.	iving ample time for
					vere seeded in warm sea	
			PRO TIP: Drag an	ny "heavy use" winter fee	ding sites with surface so	pil disturbance.

## Watering Systems

Water is essential for livestock to effectively graze forages. A well-planned and installed water system will provide an adequate quantity of water with minimal disturbance to the soil resource and to the water source itself.

Common sources of water for livestock are streams, ponds, lakes, and wells. Of these sources, well water is preferred because it is cleaner. Research shows that there can be a significant increase in animal performance and improved herd health if the drinking water is clean and free from sediments, nutrients, pesticides, algae, bacteria, and other contaminants.

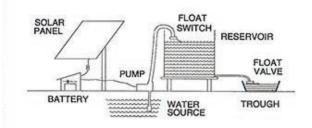
## Alternative methods of delivering the water to the livestock include:

- Gravity Flow
- Standard Electric Pump
- Ramps to surface water (ponds, etc.)
- Solar pumping systems
- Hydraulic ram pumps
- Gasoline powered pumps





For step-by-step instructions on how to construct an NRCS-sanctioned watering system for your pasture, contact AGLC to request an official instructional video on a convenient USB drive - or visit the Official AGLC YouTube Channel.



These methods can be used to discharge directly into a trough or tank, but normally a pipeline is installed to distribute the water to drinking facilities available in all paddocks. When using a pipeline to deliver water you may need to have a system that is engineered to meet the specific needs of your site.

## Considerations in designing a pipeline system include:

- Quantity of water to be delivered
- Pressure differences due to elevation changes
- Length of pipeline
- Protection from freezing
- Possible future expansion

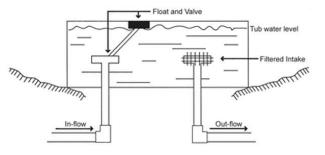
#### Where should drinking facilities be located?

Drinking facilities should be available in each paddock. If possible, locate drinking facilities so that livestock do not have to travel excessive distances to drink. In systems where livestock must travel long distances to water, forages tend to be overutilized near the water, and underutilized in areas of the paddock that are farthest from the water. Other problems associated with this situation include uneven manure distribution in the paddock and diminished animal performance.

Most livestock watering systems consist of a pump, a delivery system (usually a pipeline), and a trough or tank for the livestock to drink from. Once the paddock layout is established, and the water sources identified, the delivery system must be accommodated. If water is to be hauled, access by the tanker needs to extend to each storage tank. If the water is to be delivered through a pipeline, the route must be determined so that each paddock in the system has access to the water. The pipeline layout should follow the shortest route to minimize cost and maintenance problems. This will ultimately determine the general area in which the wateringtanks will be placed.

Water tanks should be placed on soils that can support heavy traffic and provide easy access by livestock without crowding. Permanently installed tanks should have some type of heavy use treatment around them to prevent the formation of a mudhole. Refer to the following section on Heavy Use Area Planning.

Portable tanks offer the most flexibility. Their location can be changed frequently by adding a length of pipeline between the coupler and the tank and placing the tank in a different location. The tanks can be moved as often as necessary to manage grazing and avoid creation of barren areas and mudholes.



## **MAY 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
warm : to war <b>PRO TIP:</b> Allow	e grazing pressure on p season mix to assist in th m season grasses. warm season grasses tim stress before grazing.	e seasonal transition	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## Heavy Use Areas

Some areas of the pasture system will be used so much that the best option is to place some type of protective material to prevent the formation of mudholes. Two such areas are those that surround watering facilities and the alleyways used for livestock movement.

It is recommended that managers utilize the method described below to create pads and alleys with multiple layers of various types of protective materials designed to reduce erosion and mudholes in high traffic areas of your pasture or paddock.

#### How to Construct a Heavy Use Protection Pad with Crushed Stone Surfacing:

1. Earth below gravel shall be uniformly graded and compacted.

**2.** Geotextile may be woven or non-woven and shall comply with construction specifications AR-95 geotextile.

**3.** Stone shall be crushed limestone or other approved material stone surface shall be compacted to a dense smooth finish.

**4.** Surface should slope away from water or feed trough 1/4" - 1/2" per foot and may be adjusted by engineer to fit the topography as needed. Avoid slopes that cause erosive velocities.

5. Stone shall meet material specification ASTM D6092.

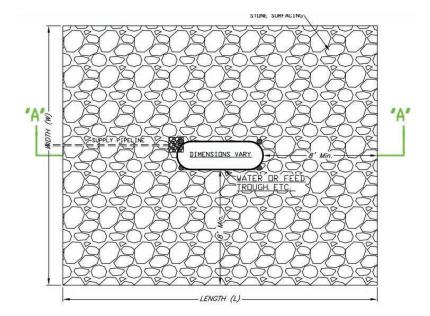
**6.** Coal bottom ash blend (BAB) may be used in lieu of stone with a minimum thickness of 9 inches.

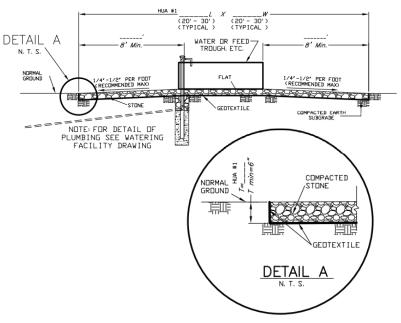
7. Coal fly-ash must comply with construction specification AR-29 soil cement.

8. Coal fly-ash treated area that support vehicle traffic shall be 12 inches thick.

**9.** Rock gradation shall be SB2 or equivalent cut aggregate approved by the NRCS engineer complying with (ASSHTO T11 and T27) requirements (AHTD Test Method 304).







For step-by-step instructions on how to construct a Heavy Use Area Watering Pad for your pasture, contact AGLC to request an official instructional video on a convenient USB drive - or visit the Official AGLC YouTube Channel.

## **JUNE 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>PRO TIP:</b> Conta about	ct your local Cooperative hay testing.	e Extension Service				1
<b>PRO TIP:</b> Clip co sunlig	ool season pastures to al ht into the lower plant c	low additional anopy.				
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23/30	24	25	26	27	28	29

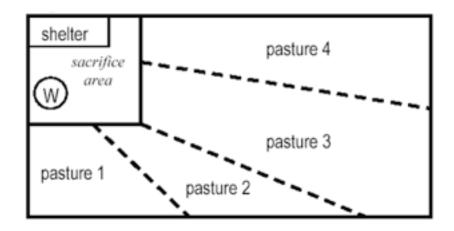
## Sacrificial Paddock Management

Sacrificial paddocks are very important in an effective pasture layout - especially during times of drought or extended wet periods. During these times, pasture and forage growth can be hindered by a lack of necessary moisture. In contrast, too much moisture can be detrimental to the condition of pastures if livestock are allowed to trample in saturated areas.

When weather events like these occur, bring your livestock into the sacrificial paddock, where water is readily available and the nutrition of your livestock can be supplemented with stockpiled forage and feed until conditions improve.

If you do not have a designated sacrifice area when a similar weather event occurs, designate one of your paddocks in the moment - and bring all your livestock together. It is better to concentrate the damage to the soil in one area of your pasture, as opposed to the spreading it over the whole field.

Once conditions have improved, you will need to consider whether or not your sacrifice area will be able to rejuvenate and re-enter the grazing cycle. This should be determined based on the severity of the soil damage. Consider the following options when making that determination.



#### **OPTION A:**

If it is determined that your paddock can rejuvenate on its own given adequate rest, then the forages previously thriving should regenerate. However, this method does leave you open to the potential risk of undesirable vegetation taking root in your paddock. If left uncontrolled, this could result in weeds taking over your paddock and spreading throughout your pasture.

#### **OPTION B:**

If the site is too severely damaged to regenerate on its own, consider preparing the paddock for reseeding with a desired forage. This is typically a safe option for paddocks that have been under heavy use for an extended period of time, ensuring a positive outcome despite additional effort and input.

## **JULY 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	PRO TIP: Regular	ure cattle have plenty of s ly check voltage on elect ons will decrease the gro	tric fences. Dry

## Weed & Brush Control

Controlling weeds and brush in your pasture will increase forage production, carrying capacity and ultimately, your profits. Weeds and brush compete for valuable nutrients and water. Every pound of weeds means less pounds of desirable forage. Grass in weed-free pastures form thicker stands, which cattle and sheep graze more uniformly, thus wasting less forage. Effective management of weeds starts with identification of undesirable plants. Paddocks should be scouted regularly during the growing season and treated with suitable weed control practices.

## Effective Weed & Brush Control Methods

#### Prevention

Good land management will help keep desirable vegetation healthy and weeds under control.

#### Seeding

Most annual, biennial and perennial weed species are effectively controlled once a thick legume-grass or grass sod is established.

#### **Biological Control**

Sometimes nature finds a way to weaken or kill a weed species. For instance, certain fungi and insects attack seed heads and other plant parts. More common methods of biological control involve the use of sheep to target weeds, and goats to clear unwanted brush.

#### **Livestock Grazing**

Graze weeds before they go to seed because livestock can easily carry and spread seeds on their coats or in their waste. Livestock will control most plants they can eat, and many weed species are palatable and nutritious to livestock if grazed before seed head formation.

#### **Mechanical Control**

Mowing weeds or harvesting hay before weeds go to seed may help eliminate them in paddocks. Clipping in the fall can help control tree seedlings such as buckbrush, hazelbrush and others. Some regrowth may occur, but clipping can reduce the chances of brush taking over the pasture. Clipping also weakens weeds as they go into winter, making control easier the next year.

#### **Chemical Herbicides**

Herbicides may be expensive, but are effective when applied in the proper amounts and at the proper time of year. Fall spraying with 2-4,D may be effective in many grass pastures. New weeds that started in late summer and weeds that regrow after clipping are especially vulnerable. Read label instructions carefully and follow directions.

Herbicides may also be used to manage unpalatable woody shrubs and brushes. However, when controlling brushes, trees and large shrubs, consider leaving some for a field windbreak. Fencing livestock away from windbreaks encourages grazing in open pastures while providing excellent protection for livestock.

#### Burning

Native warm season grasses may benefit from periodic burning. Burning stimulates growth by reducing competition from weedy plants and removes excess plant residue.

All of these weed and brush control practices may influence livestock distribution. Think about the results of these practices before you apply them to ensure they will have a positive effect on grazing and will result in more plant and animal production.

## **AUGUST 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
PRO TIP: Remove	e warm season growth a	nd plant cool season an	nuals in September.	1	2	3
<b>PRO TIP:</b> Indentify residue in early August t	pastures with Bermuda gras: o a stubble height of 2 to 3 i ontinue grazing in these are	s for stockpile forage. Remov nches. Fertilize 50 to 60 pou	e existing forage			
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## Grass Identification

Source: Arkansas NRCS



**Annual ryegrass Key Characteristics** 

Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity

Bahiagrass **Key Characteristics** Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity



Bermudagrass **Key Characteristics** 

Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity



**Big Bluestem Key Characteristics** 

Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity





**Cereal Rye Key Characteristics** 

Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity



Crabgrass **Key Characteristics** Ease of Establishment

Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity

#### Dallisgrass **Key Characteristics**

Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity



#### **Forage Brassicas Key Characteristics**

Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity



## **SEPTEMBER 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	due dates. <b>PRO TIP:</b> Identify pa of 3 to 4 ir	stures with tall fescue for sto nches. Fertilize 50 to 60 lbs. c	ockpile forage. Remove existi	Check with your local NRCS f ng forage residue in Septeml inue grazing in there areas u er.	ber to a stubble height

## **Grass Identification**

Source: Arkansas NRCS





#### Eastern gamagrass **Key Characteristics** Ease of Establishment Drought Tolerance Wet Site Tolerance

Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity

Indiangrass **Key Characteristics** Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hav Use Tolerance to Soil Acidity



#### **Novel Endophyte Tall Fescue Key Characteristics** Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity



#### **Orchardgrass Key Characteristics**

Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity





Pearl Millet

Hay Use

#### **Sudangrass Hybrids Key Characteristics**

Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity



#### **Switchgrass Key Characteristics**

Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity



#### **Toxic Endophyte**infected Tall Fescue (K31)

#### **Key Characteristics** Ease of Establishment

Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor Hay Use Tolerance to Soil Acidity



**Key Characteristics** Ease of Establishment Drought Tolerance Wet Site Tolerance Close Grazing Tolerance Seedling Vigor





## **OCTOBER 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>PRO TIP:</b> Use st rotatic stockp	trip grazing or onal grazing on biled bermudagrass.	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	<b>PRO TIP:</b> Inventory winter fe <b>PRO TIP:</b> Consider animal/fe culling ye	eding. adjusting the prage balance by

## Soil Health & Condition

Healthy soils and proper grazing management go hand in hand. While improper grazing can result in compacted soil, reduced plant vigor and soil degradation, properly managed grazing can manifest a host of benefits above and below the surafce of the soil. Make sure your grazing management system is properly calibrated to optimize your pasture's soil health. Below are key indicators that can help determine if your pasture's soil health is improving or declining. If you recognize an imbalance - take steps to correct the issue.

#### UNDERGRAZED

#### OVERGRAZED

## **Proper Grazing**

- Soil densities and structure that allow root and water penetration of the entire soil profile.
- Vigorous forage plants with capacity to develop and maintain extensive rooting systems.
- A community of palatable forage plants with high rooting mass and depth.
- Stable, resilient increases in primary productivity both above- and below- ground.

## Improper Grazing

- Decreased infiltration and soil water, thus increased runoff and pollutant transport.
- Decreased plant rooting and productivity, thus decreased soil carbon and stability.
- Decreased soil fertility, thus decreased above- and below- ground biomass and biodiversity.



## **NOVEMBER 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
PRO TIP: Identify PRO TIP: Make an hay fee	ding.			winter grazing and	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

## Grazing Plan Checklist

This list identifies the primary components of a grazing plan. Addressing each of these will result in a detailed plan for proper management of a forage-based livestock operation.

### **Sensitive Areas**

 Sensitive Areas Identified and Described
 Management Strategy for Protecting Sensitive Areas

### **Livestock Summary**

 Livestock Kind and Class
 Livestock Number and Average Weight by Herd
 Forage Balance Sheet

## Fencing System

Kind of Fence Defined
Fence Locations Shown on Map
Length of Fence to be Constructed

### Livestock Watering System

Water Source Identified
 Location of Pipelines Shown on Map
 Locations of Permanently Placed Tanks

Shown on Map

Length of Pipeline and Number of TanksEmergency Watering Plans Outlined

### **Heavy Use Area Protection**

□ Locations Shown on Map

## Forages

Forage Species Identified
 Condition of Pastures Documented
 Forage Production Estimates Made

Detailed Seeding Plans Prepared

## **Grazing System Management**

- Guidance for Initiating and Terminating Grazing
- Contingencies for Wet Weather and Drought Defined
- Grazing Management Prior to Fall Freeze Addressed
- Forage Deficiencies and Surpluses Addressed
- Sacrificial Paddocks Identified
- Rejuvenation of Sacrificial Paddocks
   Addressed
- **D** Livestock Over-wintering Areas Identified
- Brush and Weed Control Addressed
- Pasture Fertilization Addressed

## **DECEMBER 2024**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	time. Pic the sam	k up sampling instructio	soil test done this year, r ns from the county exter he county office for testir application rates.	nsion office, collect

## References

**Daily Herd Forage Requirement** (# of animals) x (average weight) x (daily intake rate) = daily forage requirement

**Monthly Forage Requirement** (daily forage requirement) x (# of days per month) = monthly forage requirement

**Seasonal Forage Requirement** (daily forage requirement) x (# of days in the grazing season) = seasonal forage requirement

**Total Yield** (forage yield) x (acres) = forage production

**Forage Availability Per Month** (total yield) x (% forage available by month) = monthly available forage

#### Minimum Number of Paddocks for Each Herd

Paddock Number = Rest Period (days) / Grazing Period (days) + 1

**Paddock Size Requirments** Paddock Size = (daily herd forage requirement) x (days in grazing period) / (lbs. forage available per acre)

#### Number of Livestock a Paddock will Support

Number = (pounds of forage/acre) x (# of acres) x (% grazing efficiency) / (individual animal weight) x (intake rate in % BW) x (days)

#### How Many Days a Paddock will Support a Herd

Days = (pounds of forage/acre) x (# of acres) x (% grazing efficiency) / (daily herd forage requirement)

If you have a grazing stick, keep it handy while checking pastures. This is a useful tool that helps you calculate the formulas above right from the field. Don't have one? Request your official AGLC grazing stick by contacting your local AGLC or Arkansas NRCS representative.

## Grazing Plan Evaluation

Now's the time to evaluate the effectiveness of your grazine plan over the past season. Refer back to the Grazing Resource Inventory pages toward the front of this planner. Then, record in the columns below your observations relative to each prompt. At the end of each column, give your plan a grade. Combine each column to determine an average for your grazing plan's overall grade, and record it in the box to the right.

Has the productivity of my pasture improved?	Has the quality of my forages improved?	Has the quality of my soils improved?	How has the condition of my watercourses changed?	What changes have occurred in the local bird population?
Clipping and weighing pasture areas each year at the same location and same time of the year will provide useful information to determine the trend of productivity for a pasture.	Forages that are in good condition will produce more feed than forages that are in poor condition. This evaluation should be done in the same area of the pasture and at the same time of the year each time.	Soils are in good condition when they allow easy infiltration of rainfall, allow easy exchange of air with the atmosphere, and support a wide range of life-forms Organic matter content is a good indicator of soil health.	Well-managed grazing will lead to improvements to watercourses within the pasture system. Features such as erosion in the bottoms and sides of channels should be noted, as well as the condition of the existing vegetation.	Birds are excellent "barometers" of the environmental condition of your pastures and your farm. The more diverse the species and the higher the counts within each species, the healthier the environment on your farm.
GRADE	GRADE	GRADE	GRADE	GRADE

GRADE

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