POLK COUNTY GRAZIER

September 19, 2023

An eNewsletter by the Rich Mountain Conservation District

ATTENTION NUT LOVERS!!!!

The annual nut sale has started at the Rich Mountain Conservation District!

There is a variety of nuts to choose from such as pecan halves and pieces, praline pecans, white chocolate pecans, amaretto pecans, dark chocolate pecans, milk chocolate pecans, honey pecans, chocolate peanuts, chocolate almonds, cashews, and walnuts.

Orders will be taken until October 20, 2023 and nuts are scheduled to be received mid-November.

Proceeds from the nut sales go towards the RMCD annual scholarship that is awarded to Polk County students who will be going into an agriculture or conservation related field in college.

Please help to support this worthy cause by purchasing some of these items. By doing so you are supporting our local youth with the opportunity to continue their education.

An order form is attached or you can pick one up at the RMCD office at 508 7th Street in Mena or you can call (479) 437-6054 and request one to be mailed, faxed or emailed to you.

NUTRIENT MANAGEMENT OF PASTURES

Introduction

Nutrient management planning for pastures in Arkansas has become an important component of management of livestock farms. The rapid increase in the cost of fertilizer necessitates a comprehensive approach to nutrient management for farms with grazing lands. This approach should include nutrient recycling through grazing management, addition of clovers to pastures, increasing the organic matter in soils, and consideration of where and how to feed hay. The focus of this fact sheet is to discuss how to maintain a fertility level of soils and adequate nutritional quality of pastures without having to add maintenance fertilizer.

Nutrient recycling

Grazing animals impact the fertility of pasture since only a small portion of what they ingest is not returned to the pasture system. Estimates are that 60-90% of the nutrients eaten by the animal are excreted in the form of urine and manure. Under a well-managed rotational grazing system, the excretion covers 30-40% of the pasture surface annually. Consider that a urine patch may contain as much as 1000 lbs. of N/acre. Therefore, the more efficiently nutrients are cycled in the system, the lower the nutrient losses and the lower the maintenance fertilizer needed.

Cows will defecate around 10 times a day with each manure pile covering a square foot and contributing 200-700 lbs. N/acre. They will also urinate 8-12 times a day with each urination spot receiving an equivalent to 500 to 1000 lbs. of N/acre. However, cattle do not deposit urine and feces evenly across pastures. Losses occur by transfer of nutrients from grazing areas to animal concentration areas (shaded areas, alleyways, streams or stream banks). Returning the nutrients to the pasture rather than the loafing areas is very important.

An intensive rotation of moving cattle every two days has been shown to cover every square yard with manure in two years. A continuous grazing program would require 27 years and more nutrients are deposited in shade areas, near or in streams or other loafing areas. Animals in smaller pastures tend to minimize congregation where they deposit manure near the water source, salt block or shade.

Water distribution

When the water source is near their grazing, even herd animals tend to drink individually. If they have to walk a distance to water (over 800 feet), they tend to travel as a group. The more watering points and the closer they are, the better the nutrient distribution. Conversely, the fewer watering points increases the animal concentration and decreases the nutrient distribution. Therefore, water distribution is not only important to maintain water quality but to also maintain pasture fertility.

Organic matter and biological activity

The overall biological activity of soil generally increases in properly grazed pastures. Building the soil organic matter and dense masses of pasture roots increases microbial biomass as well as increasing the water holding capacity of the soil. Additionally, the manure and proper manure distribution contributes to increasing soil organic matter. The release of nutrients is dependent on factors contributing to the breakdown of the manure. Fungi, bacteria, soil microbes, beetles and earthworms help in that process. Each one per cent of organic matter can provide up to 20 pounds of nitrogen. Under moist conditions and with lush vegetative growth, the more liquid manure breaks down more rapidly than the drier manure consisting of more indigestible dry matter from mature forage or hay.

At times manure is slow to break down and may kill the forage beneath it; however, the area adjacent to the manure has increased growth. It has been estimated that cattle dung patches affect the growth of forage 5-6 times greater than the actual manure area. Tillers from the adjoining area tend to cover the affected area and white clover invades readily. Rejection of forage around manure, up to 5-10 times greater than the area covered by manure, is initially because of the odor and then the forage becomes mature and unpalatable. A rotational program with a high stock density decreases the wastage. By the fourth rotation, there should be no evidence of a difference in cover around manure piles.

Legumes

An important source of fertility for pasture maintenance is legumes. Some legumes can provide as much as 200 lbs. of N fertilizer per acre of pasture. Alfalfa and white clover are optimum nitrogen fixers with hairy vetch, red clover and annual lespedeza important contributors also. A pasture with 20-40% legumes can sustain the nitrogen needs of the other plants in the pasture. Recycled nutrients in a grass-legume system are sustained at a much higher level than in an extensively managed system with only grasses. Legumes can be difficult to maintain in a pasture system as they require a well-managed grazing program to provide rest for regrowth and defoliation of grasses to keep competition down. Periods of dry weather and some herbicides interfere with legume growth. Spring nitrogen fertilization encourages grass growth and decreases the input from legumes since they will also consume the fertilizer instead of fixing their own. Legumes and the soil livestock are more vigorous with more neutral pH. Pastures are botanically unstable over time so small changes in environmental conditions, grazing management or stocking rate can change the plant species in the pastures. Rest periods, and not overgrazing pastures, are very important in maintaining a legume presence in pastures

Hay feeding

Feeding hay is a nutrient management practice. A recent estimate of nutrient content of hay is 42-14-48. If hay is fed in pastures and the feeding areas are rotated, the net effect is one of fertilizing those areas through the deposition of manure and urine as well as the residue from feeding the hay. This is especially true if the hay was purchased from off the farm. Placement of hay bales in areas that need extra fertility, away from drainage into water sources, and not feeding bales in the same place all the time contribute to the fertility of the pastures. If hay is cut on the farm and the bales are not fed back on those same pastures, they can become nutrient deficient and less productive.

Summary

Nutrient management of pastures can be enhanced by

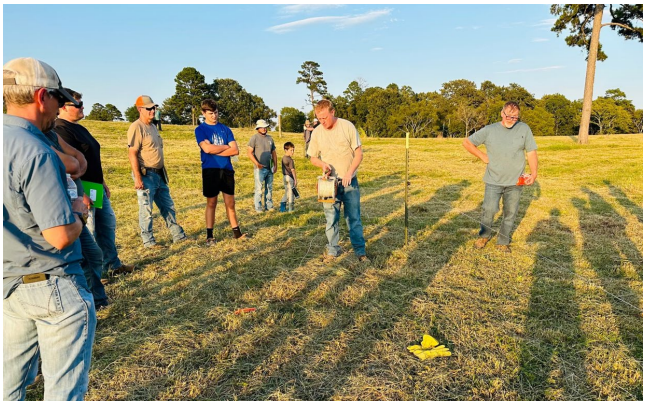
1. Building organic matter—strive for an estimate of 4%.
2. Feeding hay—when hay is purchased, how much does it contribute to soil fertility?
3. Rotate livestock frequently to distribute manure and urine more effectively—strive to cover each acre every two years.
4. Add legumes—a 30% stand of legumes can add over 100 lbs. of nitrogen/acre.
5. Soil "livestock"—earthworms, dung beetles and soil microbes assist in breaking down manure and making the nutrients available to the plants.
6. Ensure filter strips or buffer areas between hay feeding areas and water sources in order to protect water quality.

"Take Care of the Land and the Land will Take Care of You"

---Hugh Hammond Bennett, First Chief of the Natural Resources Conservation Service

RMCD Conducts Grazing Management Workshop

The Rich Mountain Conservation District held a grazing management workshop on the farm of Tim Milham near Mena on September 5th, 2023. Several ranchers from Polk and Montgomery counties attended the workshop and were provided information on topics such as using electric fence, watering system options, and USDA programs available. In the below picture Jeremy Huff, NRCS Arkansas State Grazing Specialist, demonstrates the use of a polywire reel to allow graziers to reduce the size of their pastures.



RMCD is accepting bids on a GameChanger Jr Hog Trap until October 31st, 2023. The trap includes the standard package:

- **2 – 8′ gates**
- **8 – 8′ welded wire mesh panels**
- **Trailer and Hinge Panel**
- **Solar Panel, Battery, Antenna Pole**
- **GameChanger Camera System**

This trap allows for real-time video and gate drop with the push of a button and is 3 years old.

Please contact the RMCD office at 508 7th Street, Mena (479) 437-6054 to submit a bid. RMCD maintains the right to reject all bids.

The Ouachita Beekeepers Association will be hosting a free informative meeting on "Preparing Honey Bees for Winter"
on October 10th at 7:00 pm at the UA Rich Mountain's Ouachita Center in the Carver Grand Hall.
The special presenter will be Dr. Jon Zawislak, UofA Extension Apiculture Specialist.
Please see the attached flier for more information.
Bee There!

The Rich Mountain Conservation District has equipment available for rent to landowners in Polk County:

SUNFLOWER NO TILL DRILL

$10 ACRE, $50 MINIMUM

TYE NO TILL DRILL
$10 ACRE, $50 MINIMUM

RHINO POST DRIVER
$150 PER WEEK (5 days) with a $100 deposit

3 POINT CYCLONE SEEDER
$75.00 per week (5 days) with a $50 deposit

Building electric fence?
We have a spinning jenny & electric fence tester available for landowners use

Please contact RMCD at (479) 437-6054 for more information or to make a reservation. Note: the available days for the no till drills are filling up fast for this fall so call and make arrangements as soon as possible! Most winter annuals such as Ryegrass, Wheat, or Cereal Rye should be planted between September 1 and November 1 but September 15-October 15 is usually optimum.

Know someone who would enjoy receiving this newsletter?

Please feel free to forward it to them and have them contact our office to be on the mailing list in the future!

Rich Mountain Conservation District
Web: www.rmcd.org
Email: rmcdistrict2023@gmail.com
Phone: (479) 437-6054
Mail: 508 7th Street, Mena, AR 71953

Sent on behalf of the Rich Mountain Conservation District.
Thanks for your interest in grazing management and conservation,

Steve Swall
District Conservationist
USDA-Natural Resources Conservation Service
Mena Service Center (Polk & Montgomery counties)
(479) 437-6054

Rich Mountain Conservation District

508 7th Street, Mena, AR 71953

Phone: 479-437-6054 Fax 855-655-8286 Attn: RMCD

Email: rmcdistrict2023@gmail.com

Taking orders until October 20, 2023

2023 Annual Nut Sale			Quantity	Total
Pecan Halves	1 lb. bag	10.00		
Pecan Pieces	1 lb. bag	10.00		
Cashews	1 lb. bag	10.00		
Amaretto Halves	1 lb. bag	10.00		
Chocolate Peanuts	1lb. bag	10.00		
Chocolate Almonds	1lb. bag	10.00		
White Chocolate Pecans	1lb. bag	10.00		
Praline Pecans	1lb. bag	10.00		
Honey Pecans	1lb. bag	10.00		
English Walnuts	1lb. bag	10.00		
Dark Chocolate Pecans	1lb. bag	10.00		
Milk Chocolate Pecans	1lb. bag	10.00		

Order Total: $_____

Name: _____

Address: _____

_____

Phone: _____

Proceeds go towards our annual Scholarship Fund!

Orders will arrive in time for Thanksgiving baking!!

The Ouachita Beekeepers Association

presents

Preparing Honey Bees for Winter

Join the **Ouachita Beekeepers** and

UADA Extension Apiculture Specialist

Dr. Jon Zawislak

for an evening of bee talk

Tuesday, October 10, 2023
7:00 pm

The **Ouachita Center** at UA Rich Mountain

Carver Grand Hall

1100 College Drive, Mena, Arkansas 71953

This presentation is free, but seating *is limited*.

Dr. Jon Zawislak is the Assistant Professor of Urban Entomology & Plant Pathology at UADA and is an EAS-certified master beekeeper.

The Ouachita Beekeepers Association meets on the SECOND Thursday of the month at 7 pm (or at 6 pm when the time changes) at the UA Extension Education Building located at 211 DeQueen St. in Mena. Come join your local bee club and learn about honey bees & beekeeping.