



What's Your Beef

Winter 2016

LITTLE RIVER COUNTY EXTENSION OFFICE

LITTLE RIVER COUNTY BEEF AND FORAGE NEWSLETTER

INTRODUCTION...

Hello Little River Cattle and Forage Producers!! I am still making my way around to meet people, but I thought I would take this opportunity to introduce myself. I am Sherry Beaty-Sullivan I am your new County Extension Agent-Agriculture/Staff Chair. I realize I have big shoes to fill following Joe Paul, but I will work to do my best The Reader's Digest version...

I grew up in Extension and 4-H, my dad was an Extension Agent before he retired, so that is how I got interested in Extension work (it really isn't work when you enjoy what you do). I am going into my 18th year working for Extension and the last 15 years were spent in Howard County.

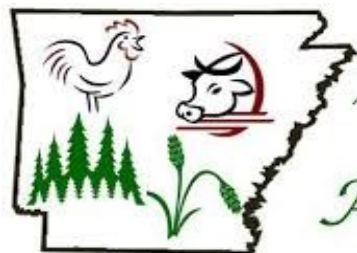
I am so excited to be here and get to know and work with the producers and people of Little River County. On a personal note you will find that I love to laugh and have a quirky sense of humor I hope to interject that into the newsletters and news articles as I go.

UPCOMING EDUCATIONAL OPPORTUNITIES

***Pesticide Applicator Training** is scheduled for **Thursday, March 17 at 6:00 p.m.** in the Millwood Room at CCCUA. Cost is \$10/licensee.

***Pennington Seed** is hosting a **MaxQ II Field Day on March 28.** Meet at Davis Feed Store at 1:00 p.m. to travel to the field location.

***Area-Wide Grazing School** will be held in Nashville at the Farm of Jerry Christie on **Tuesday, April 5th from 2-5 p.m.** Call the office for more information.



LIKE US ON FACEBOOK

We now have a **Little River County UAEX Ag & Natural Resources Facebook page.** <https://www.facebook.com/Little-River-County-UAEX-Agriculture-Natural-Resources-1557114677914094/>

I will try to post upcoming events for Little River County and surrounding counties if I think it will be of interest to our producers and relevant articles.

It is for all agriculture and natural resources, so you may find beef and forage topics, gardening topics, environmental topics, beekeeping, etc. It is just another resource tool for you.

It will be research-based information, so you can trust that it will be unbiased and proven information. I try to post pictures, as well.



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PASTURES

Pasture Management

Good land management starts with a clear and attainable goal, but this is one of the most challenging steps in resource planning. The primary concern of pasture management is vegetation.

Pastures are dynamic — they are always changing and responding to climatic cycles, weather, fire, insects, grazing or browsing, and soil disturbances caused by animals and humans. Therefore, it is important to set achievable and measurable goals.

Goal setting helps land managers better understand where they are now, relative to what they want to achieve. Pasture goals can include sustained forage and browse production, fish and wildlife habitat, watershed enhancement, prevention or control of invasive species, recreational opportunities, and other uses on pastures.

No matter the goals, proper management is dependent on maintaining healthy soil condition, functional watersheds, and desirable plant communities.

Pasture Grazing Management Guidelines



Livestock grazing is one of the most widespread and important uses of rangelands. Renewable plant resources provide forage for ruminant livestock like cattle, sheep, and goats; and the ruminant animals subsequently provide food and fiber for people. This method of harvesting solar energy requires relatively low inputs of petroleum products for agricultural production. Rangeland livestock, however, must be managed properly to ensure the long-term sustainability of the soil-plant-animal resource base.

There are a set of basic grazing management principles and a set of grazing management guidelines that should be considered.

Grazing Management Principles

The art and science of grazing management involve manipulating the grazing animal, the forage plant, and the soil complex to obtain specific ecological and economic objectives.

The successful grazing manager must thoroughly understand how plants grow and reproduce if he wants to understand how grazing animals affect plants through defoliation, hoof action, and other aspects of the grazing process.

In addition, managers must understand the grazing animal, specifically its nutritional needs at critical points of the production cycle and its behavioral characteristics. Then managers can begin to consider the following:

- When should grazing occur? (timing)

- How often should defoliation occur? (frequency)

- How much forage should be removed, or how much residual plant material should remain after grazing? (intensity)

- How many and what type of livestock should be grazed? (stocking rate and type of livestock)

How plants respond to grazing is determined by the timing, intensity, and frequency of grazing as well as the physiological and morphological characteristics of the plants and how these characteristics affect plant growth before and after grazing events.



Grazing Management Guidelines for Sustainable Pasture

Guidelines have been developed through research and experience. They include timing of grazing, frequency of grazing, intensity of grazing, type of livestock, number of animals, animal distribution, grazing selectivity, and grazing systems.

WHAT MAKES A PLANT A WEED?

Three important characteristics that make a plant a weed are competitiveness, persistence and forage value.

Competitiveness

Weeds may reduce forage yield by as much as 50 percent through competition for space, light, water, and nutrients. The rule of thumb is that for 1 pound of weeds produced there is 1 pound of forage lost. Many annual weeds have very rapid growth rates compared to forage species. The fast growth rate combined with the tremendous number of weed seeds in the soil increases the competitive advantage of weeds over forages. Many weeds are left ungrazed in pastures because they are less palatable than forage plants, thus they become larger and even more competitive.

In addition to competing for the elements needed for growth, some weeds are allelopathic meaning they exude chemicals that inhibit the growth of other plants. Allelopathy is the production of chemical compounds by plants that inhibit the growth of other nearby plants. Black walnut is a good example of an allelopathic plant. Tall fescue is also an allelopathic plant. Allelopathy occurs widely in natural plant communities and is thought to be one mechanism by which many weed species interfere with crop growth.

Persistence

Some characteristics that make weeds persistent are:

(1) The ability to produce large numbers of seeds. A single pigweed plant can produce up to 117,000 seeds in a single season. Common ragweed is capable of producing up to 15,000 seeds per year. Sandbur may produce 1,000 seeds per plant. If left uncontrolled, weeds build a

tremendous seed reserve in the soil that will remain viable for many years.

(2) The most persistent weeds have the ability to produce seeds under adverse conditions. Some summer annual weeds germinating as late as September in Arkansas may set viable seeds before frost. Many weeds, even if mowed late in the season, will resprout and produce seed before the first killing frost.

3) Perennial weeds often produce extensive vegetative reproductive structures that help them survive and spread. Wild garlic can produce hundreds of hard shell bulblets that can remain viable for five years or more. Nutsedge produces thousands of tubers that help it survive. Horsenettle sends out runners from the mother plant that give rise to daughter plants. Johnsongrass has been shown to produce up to 4.5 tons of roots per acre. Weeds arising from vegetative reproductive structures, such as roots, bulbs and tubers, are faster growing and harder to kill than those emerging from seed.

(4) Many weed seeds have dormancy mechanisms that stretch their germination period over many years. Factors needed to induce weed seed germination include light, exposure to cold temperatures, and scarification of hard seed coats. Crabgrass is an example of a weed that requires light for germination. Tillage can create a crabgrass infestation in a field where crabgrass was not previously a problem by exposing the dormant seed to light. Horsenettle, a problem pasture weed, has chemical germination inhibitors in the seed that must be leached by rainfall before they will germinate. Other weeds have the ability to germinate almost immediately after ripening. Most of the common thistles found in Arkansas require very little ripening prior to germination. About 50% of the

seed of bull and musk thistle will germinate within two months of seed release. This figure increases over time to 90% and remains high one year after release. Thistle seeds may remain viable in the soil for as long as five years.

Forage Value

The grazing value of a plant should be considered before control efforts are made. The weed may be a valuable forage during critical growth periods or it may be easily kept under control by grazing management. Many weeds compete with forages reducing the overall grazing days per acre, but other weeds are readily grazed by livestock and are becoming more accepted as good quality forages. Some examples include crabgrass, Johnsongrass, and Dallisgrass. Winter-annual weeds such as little barley and cheat may produce a considerable amount of spring grazing, especially in southern Arkansas. Other weeds such as common ragweed are readily grazed when immature and produce an abundance of seed that is an important food source for quail and other wildlife species.

Goals for both livestock and wildlife production should be considered when developing a weed management plan.

MY FUNNY BONE

Things to Ponder

Who was the first person to look at a cow and say, "I think I'll squeeze these dangly things here and drink whatever comes out"?

Mosquito: An insect that makes you like flies better.

I've gone to look for myself. If I should

return before I get back, keep me here!

Can something be both new and improved?

All of us could take a lesson from the weather. It pays no attention to criticism.



The Arkansas Cooperative Extension Service is an equal opportunity/equal access/affirmative action institution. If you require a reasonable accommodation to participate or need materials in another format, please contact your County Extension office as soon as possible. Dial 711 for Arkansas Relay.

A handwritten signature in black ink that reads "Sherry Beaty-Sullivan". The script is cursive and fluid, with the first letters of each name being capitalized and prominent.

Sherry Beaty-Sullivan
County Extension Agent-
Staff Chair/Agriculture