GARFIELD COUNTY EXTENSION

AG NEWS

JUNE 2023

Pasture Management

Currently there are still tight hay supplies and many overgrazed pastures. Additional management will likely be warranted this year to help recover perennial warm-season pastures. On these farms, removing livestock and receiving much needed rainfall are going to have the largest impact. The two main management practices that can be done are taking care of soil fertility and weed control. Now is the time to be planning annual hay forages, perennial grass hay fields, and grazing pastures. There will be a higher probability of seeing a return of input investments when dealing with an introduced forage grown for hay. Bermudagrass is a great example to seeing a response from increased fertility and use of pesticides. While tonnage can be increased with added fertility to native grass pastures, often it can be hard to justify economically since the total season production is usually less than introduced species.

When deciding on how much fertilizer to apply it is always recommended to base the application rates off a soil sample and a yield goal. A $10 soil sample through the OSU Soil, Water, and Forage Analytical Laboratory collected every few years will almost always pay for itself. A yield goal will typically range between three to eight tons per acre in north central Oklahoma, depending on rainfall and soil type. Unfortunately, it is harder to determine yield goals under grazing.

In grazed pastures, forages are growing and being removed concurrently making it impossible to estimate forage production and yield goals. Less fertilization is expected in grazed pastures since some nutrients are returned to the soil. The general guideline is that grazing to produce 500 pounds of beef per acre will remove about 18 pounds of nitrogen, 9 pounds of phosphorus, and 1 pound of potassium. This 500 pounds of beef requires approximately a production of 4 tons of forage per acre.

In comparison, a hay pasture with a 4-ton yield goal will need 200 pounds of actual N per acre, while a grazed pasture that supports one cow for four months will only need 50 pounds of actual N per acre.

Research has shown no benefit to split applications of nitrogen (N) when total application rates are below 200 pounds of actual N per acre. If application rates are greater than 200 pounds of N, then split applications can be economical. If applying N to farms with coarse, sandy soil types it is recommended to limit application rates to 100 pounds of N as it is mobile in the soil and can be leached out of the system.

(Continued on page 2)

Garfield County OSU Extension

Address
316 E. Oxford
Enid, OK 73701

Phone
580-237-1228

Email
Rick Nelson
ricknelson@okstate.edu

Website
https://extension.okstate.edu/county/garfield/agriculture.html

In this issue:

(Continued from page 1)

As for weed control, it is all about proper identification and application timing. There are many pasture herbicides on the market and the price differences can be range widely. Knowing exactly which weeds are of significance in a particular pasture will determine which herbicide options are appropriate and at what application timing are recommended.

Many annual broadleaf weeds can be controlled with less expensive herbicides, such as products containing 2,4-D or dicamba, if applied when weeds are only a few inches in diameter or tall. Situations where more expensive herbicide products are warranted include; if there are brush or woody weeds present, winter weeds are abundant and summer weeds have yet to emerge, or if the target weed species are perennials.

Weed management is often more practical in haying operations. Heavy infestations of weeds in a grazing pasture is often a symptom of excessive grazing. Proper use of stocking rates and achieving adequate fertility in introduced pastures are the most economical weed management options for grazing pastures. While weeds can be unpleasant to the eye, many times weed infestations are below application thresholds. In addition, some weeds such as ragweed can often be used by cattle when it's small.

From OSU field trials, comparing doing nothing to only applying a herbicide, only fertilizing, or fertilizing with a herbicide application, we can generally predict forage production outcomes if inputs are removed. If broadleaf weeds are present, addition of fertilizer will increase total forage production, but mainly just from the weeds and not from the grass. If only a herbicide is applied, the total forage production was the same as doing nothing. Every pound of weeds removed only increased grass production by one pound (1:1 ratio). To increase total grass production both fertilizer and a herbicide will need to be applied. One field trial in Bermuda tripled total forage tonnage when adequate nitrogen, phosphorus, and potassium was applied in addition to a timely herbicide treatment.

Contact your local extension office for more pasture management information, to assist in weed identification, to submit a soil sample, or to determine the best management practices for your operation.

Josh Bushong, West Area Extension Crops Specialist

Farm Management at Your Fingertips

The e-Farm Management website gives producer resources to help inform them about farm financial management topics along with production, marketing, and risk management topics. This site includes videos, tools, and publications for farmers and ranchers to strengthen their farm management skills.

In the Master Cattlemen and Cow/Calf Boot Camp video, viewers learn about two livestock related programs offered through the local Extension office. The video describes requirements and how to participate in Master Cattlemen and Cow/Calf Boot camp programs. Lastly, the video provides ways to sign up for these programs and shows the cost of each.

To view this video and find additional information on cattle marketing, visit: https://extension.okstate.edu/programs/farm-management-and-finance/e-farm-management-training/livestock-marketing/index.html.

More information on this and other farm management topics may be found: 1) by contacting your nearest Extension Educator 2) on the e-farm management website (https://extension.okstate.edu/programs/farm-management-and-finance/e-farm-management-training/index.html) or 3) on the OSU Ag Econ YouTube Channel (https://www.youtube.com/user/OkStateAgEcon).

Summer means the taste of vine-ripened tomatoes

The smell of coconut suntan lotion, bike rides through the park or a fun family vacation can conjure up visions of summer fun for many folks. But for others, summer truly begins when experiencing the taste of the first vine-ripened tomato. No matter how you slice it, there's not much else that tastes so good.

One of the great things about growing tomatoes is that they can be grown by both seasoned and novice gardeners. Another bonus is tomatoes don't require a big, expansive garden space. In fact, if the outdoor space has room for only one pot, there's enough room to grow a tomato plant.

Gardeners may have had a tough time with their tomato plants last summer due to the excessive heat and drought. Tomatoes require a lot of water, and they dry out quickly in the heat. When selecting the spot in the landscape to plant them, choose a spot near a water spigot. These plants prefer well-drained soil, so avoid low spots where water collects. A good option for those who have less-than-ideal soil may want to consider installing raised bed. This makes it easier to incorporate organic material into the soil – and the soil will drain better. A pH level of about 6.5 is preferred. When choosing a fertilizer, choose one low in nitrogen, high in phosphorus and medium to high in potassium. Work the fertilizer into the top 6 inches of the soil.

Gardeners have a wide selection of tomato varieties. Choices may depend on what the tomatoes will be used for. Small, cherry tomatoes are great for salads, k-bobs and grilled vegetable medleys. Other varieties are great for slicing to top burgers and sandwiches. They can also be sliced for a fresh caprese salad. The options for garden-fresh tomatoes are many.

When planting tomato plants, make sure the soil is about 60 degrees. Transplant holes should be about 4 inches deep. Be sure to plant them about 2 to 4 feet apart in the row. A space of about 3 feet between rows is good for staked or caged plants. You'll need 3 to 5 feet between rows for non-staked plants to ensure plenty of room to maneuver around the garden during harvest. For those who have experienced an Oklahoma summer, you know how hot it can get. A layer of mulch around the base of your tomato plants will not only conserve water but can help increase yield and help stop weed growth. Weeds are competing for resources, so cutting down or eliminating them is beneficial to the plants. When it comes to watering, the plants need about an inch of water per week to begin with. That amount will need at least double that when the summer heat kicks in during July and August. Apply enough water to moisten the soil 12 to 18 inches. Gardeners will need to water more often if they planted in containers.

If you have a local food bank, consider planting a few extra plants and donating the extra tomatoes you harvest. Another option for those extra tomatoes is to preserve them by canning. The tomatoes can be preserved whole, sliced or pureed. With just a few extra ingredients and a little more chopping, you can make and can salsa. Canning will help that fresh taste of summer last a little longer.

As a closing thought, always remember that knowledge is that you know a tomato is really a fruit; however, wisdom is knowing not to include it in a fruit salad.

Equine herpes a growing concern this show season

A case of equine herpes myeloencephalopathy was reported at a Tulsa horse show in April.

As exhibitors gear up for a busy show and rodeo season this summer, Oklahoma State University Extension animal health specialists advise owners to closely monitor the health of their horses and implement smart biosecurity measures to safeguard against infection.

“Equine herpes myeloencephalopathy is the neurologic form of equine herpesvirus-1, which is a very common virus within our equine population,” said Dr. Rosslyn Biggs, clinical assistant professor of veterinary clinical sciences and OSU Extension director of continuing education. “We’re particularly concerned because in most instances, there’s a 30-50% mortality rate if a horse starts exhibiting neurologic signs.”

Clinical signs of a neurologic issue could include:

- Incoordination
- Instability
- Lethargy
- Loss of tail tone and hind limb weakness
- Head tilt
- Urine dribbling

The virus can also appear in neo-natal form or abort foals in pregnant mares. The incubation period is 7-14 days after respiratory or nose-to-nose transmission. Biggs said common drinking areas and humans who handle horses may transmit the virus; it can also be carried on clothes or hands, spreading from horse to horse.

“Once we have a detection, we want to isolate and monitor those horses who came in contact with the infected horse,” she said. “At a very minimum, take their temperature twice a day and look for any signs of fever. Neither ill nor exposed horses should travel.”

When attending a show, exhibitors and horse owners should practice careful biosecurity and only use stalls that have been disinfected. A 1:10 ratio of bleach to water mixture is effective for spraying down stalls. If symptoms appear in a horse, isolate the animal, determine with a veterinarian’s assistance if the condition is contagious and notify show management immediately.

“In Oklahoma, it’s required that any equine neurologic case be reported to the Oklahoma Department of Agriculture,” Biggs said. “ODAFF has funds to do free testing on horses that are neurologic to determine the potential cause. It’s a concern for the equine industry in Oklahoma and nationwide.”

Biggs discusses equine herpes myeloencephalopathy on a Vet Scripts segment of SUNUP, the production agriculture television show of OSU Extension. SUNUP airs Saturdays at 7:30 a.m. and Sundays at 6 a.m. on OETA.

Gardeners can reuse, recycle last year's potting soil

With inflation at an all-time high, gardeners may look for a few dirt-cheap ways to still enjoy their pastime. Instead of replacing the potting soil in all of their planting containers, some gardeners reuse potting mix from the past year or two. But is this a good option for the plants?

"Your wallet can take a hit if you replace potting soil every year. Of course, that depends on how much you use annually," said David Hillock, Oklahoma State University Extension consumer horticulturist. "Keep in mind, potting soil isn't soil in the traditional sense. It's a combination of peat, vermiculite and composted matter. If your plants did well last year and weren't showing any signs of disease, go ahead and reuse it this season."

Even though the potting soil still looks good, gardeners may have to amend the potting medium for optimal results. In the previous growing season, plants used nutrients in the potting soil that were added when it was manufactured.

Nutrients also leach out from the soil as plants are irrigated. Gardeners who opt to reuse potting soil this season will need to improve the porosity and fertility of the soil before planting new plants.

Porosity is the presence of air pockets and drainage space. Used soil will be more compact than fresh potting medium. The added fertilizers in a new bag of potting soil generally last three to six months; therefore, a slow-release fertilizer will need to be added to the used soil this season.

"Another option for gardeners who have larger containers is to remove only the top 6 inches or so of the old potting soil and replace it with new potting soil," he said. "Since they aren't replacing all the soil, they're saving money while still refreshing the upper area, which will aid in root growth. As gardeners begin to add the new potting soil, they should mix it into the old potting soil as they go."

Hillock cautions gardeners against reusing potting soil if they had problems with diseases, weeds or insects last year. Viruses, fungi and bacteria will remain in the potting soil long after the life of the plant.

"It's possible to destroy these pathogens, but it isn't worth the risk. The time, effort and money you put into gardening outweigh the cost savings of reusing an infected potting medium," he said.

Hillock advises gardeners to use recycled potting soil with plants that don't require rich soil to thrive.

"If you choose to replace the potting soil in your containers, don't just toss the old stuff. Add the used potting soil to your compost pile," he said. "A good compost pile has a mixture of green material, brown material and soil. The finished compost can be used to fill garden containers later in the season. The used potting soil can also be added to garden beds."

This newsletter is published monthly by the Garfield County OSU Extension Center and is one way of communicating educational information. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement is implied.

Rick Nelson
Extension Educator, Ag/4-H & CED