



The Wisest Pursuit



MARSHALL COUNTY RESEARCH EXTENSION

October/November/December 2016

Important Dates to Remember

- November 9: Calf Workshop
- December 6, 7, 8: Kansas Turfgrass Conference, Manhattan
- December 7: Lease Law Workshop
- December 13: FINPACK Workshop
- January 11: Burn School
- Jan 31: Women in Ag Series Begin

Get your Private Pesticide Applicator's Certification now!

For those that have been procrastinating the Private Pesticide Applicator's Certification, NOW is the time to knock it out. The test needs to be taken in the Extension office and is an open book test that consists of 75 multiple choice questions. The book is provided and may be picked up from my office if you would like to look at it prior. Plan for 2-3 hours to complete the exam. Currently, the certification period is 5 years. But, EPA is making changes to the requirements and certification timeline. I am encouraging producers to take the test now! Adjustments may be in place as early as January 2017. There is a \$25 exam fee payable to KS Department of Agriculture.

FINPACK Workshop

There will be an agriculture outlook meeting on December 13 at Pottorf Hall in Manhattan at 6:30. This meeting will cover a variety of topics including the farm economy and how to potentially create higher revenues and/or solutions specific to your operation. This is done by running a FINPACK Analysis of different operation practices ranging from planting more of one crop than another, adding a cow/calf operation to your farm, etc.

FINPACK provides not only a balance sheet, income

statement, and cash flow, but also financial ratios to help evaluate the meaning of your financial numbers.

By attending this meeting you will be able to run a FINPACK Analysis of your operation at a later date at a reduced cost.

Information is limited at this time because we are still planning this meeting. For more information contact Anastasia at (785)562-3531, anastasia@ksu.edu, or stop in the office.

Women in Agriculture

WIA classes will be held each Tuesday afternoon from **12:30 to 5:30 P.M.**, beginning **January 31, 2017** and continuing through March 7, 2017. Classes will be held at the Marysville City Hall, 209 N 8th St, Marysville, KS.

Women Involved in Agriculture is a six-session course for women with an interest in agriculture business management. Topics to be covered include: True Colors (personality profile), Financial Management, FSA

Programs, Marketing, Quicken, Leasing, Estate Planning, and Communication and Family Dynamics. There is an enrollment fee that covers all class materials and supper at each session.

Space is limited to 25 participants. Women interested in attending may sign up by emailing at anastasia@ksu.edu, or by calling the Extension Office 785-562-3531

Burn School

On January 11 there will be a Prescribed Burning Workshop at the Helvering Center in Marysville. Time has yet to be determined. These workshops are conducted with the cooperation and assistance of several agencies including KSRE, FSA, NRCS, KDWPT, and the National Weather Service. They are designed to help with the understanding of the nature and behavior of fire. Some of the topics that will be

covered are reasons for burning, wildlife and prescribed burning, local and state regulations, fire weather, safety, liability, use of burn contractors, planning and conducting a burn. The Flint Hills Smoke Management Plan will be addressed. The workshop is designed to either prepare the participants to begin using prescribed burning or to update their knowledge and abilities.

Lease Workshop

Ag leases are regularly used and often misunderstood. K-State Research and Extension, Geary County Extension Agent, Chuck Otte, will try to help landlords and tenants better understand the important concepts of agricultural leases. Otte will discuss various topics



including the basics of the Kansas Ag lease law, crop share leases, cash leases including variable cash leases, and the importance of communication. The meeting will be on **December 7 at 2:00 P.M.** at the Maryville City Hall and will last 1½ - 2 hours. Please RSVP at 785-562-3531 or email anastasia@ksu.edu.

Fall is a Good Time for Soil Testing

Though we often think of soil testing as a spring chore, fall can actually be a better time. Soil-testing laboratories are often very busy during the spring resulting in a longer turnaround from submission to recommendations. Also, soils in the spring are often waterlogged, making taking samples difficult. If your soil test suggests more organic matter, fall is a much better season because materials are more available than in the spring, and fresher materials can be used without harming young tender spring-planted plants.

Begin by taking a representative sample from several locations in the garden or lawn. Each sample should contain soil from the surface to about 6 to 8 inches deep. This is most easily done with a soil sampler. Many K-State Research and Extension offices have such samplers available for checkout. If you don't have a sampler, use a shovel to dig straight down into the soil. Then shave a small layer off the back of the hole for your sample. Mix the samples together in a clean plastic container and select about 1 to 1.5 cups of soil. This can be placed in a plastic container such as a resealable plastic bag.

Take the soil to the extension office to have tests done for a small charge at the K-State soil-testing laboratory. A soil test determines fertility problems, not other conditions that may exist such as poor drainage, poor soil structure, soil borne diseases or insects, chemical contaminants or damage, or shade with root competition from other plants. All of these conditions may reduce plant performance but cannot be evaluated by a soil test.



Dairy and Beef Calf Raising Workshop

University of Nebraska Extension is hosting a Rearing Young Stock for Dairy and Beef Production Workshop on Wednesday, November 9 from 10:00 A.M. till 3:00 P.M. at the Gage County Extension Office Meeting Room on the Fairgrounds at 1115 West Scott St in Beatrice. The program is designed to help farmers raising young calves to do so more successfully. Speakers include Dr. Pete Erickson from the University of New Hampshire, Dr. Jill Anderson from South Dakota State University, and Dr. Andrea Watson, Kim Clark, and Dr. Paul Kononoff from the

University of Nebraska-Lincoln. Calf raisers from all of Southeast Nebraska and Northeast Kansas are welcome. The program fee is \$30 and can be paid at the door if you e-mail Kim Clark your intention to attend at KimClark@unl.edu or you can register online at dairy.unl.edu

For more information e-mail Paul C. Hay at phay1@unl.edu, call 402-223-1384, or visit the News Column University of Nebraska Extension local Website: gage.unl.edu, Twitter: @Cloverhay

Questions on Ornamental Grasses

We are starting to receive questions on whether it is best to cut back ornamental grasses in the fall or spring. As a rule, ornamental grasses should not be cut back while green because they need time to move the energy found in the foliage into the roots. Even when browned by cold weather, most gardeners will leave the foliage until spring because of the interest it adds to winter landscapes.



Early March is the preferred time to cut back these plants. However, dry foliage is extremely flammable and should be removed in the fall from areas where it is a fire hazard. Another question we often receive is whether we can divide ornamental grasses in the fall. Spring is the preferred time because divisions done in the fall may not root well enough to survive the winter.

Frost on Lawns

If you have ever walked across a frosted lawn that isn't dormant, you may have noticed your footprints showing up later in the day. Though this is unsightly, it does not kill the turf. Grass blades are damaged but the crown is not. Actively growing turf will often recover after two to four mowings. Damage that occurs this late in the fall will continue to show

damage until it is masked by the rest of the lawn turning brown due to cold weather. It is believed that the damage is caused by ice crystals killing plant cells when they are forced into the leaf by the weight of a wheel or foot. Remember to avoid damage by staying off of frosted turf.



Tips to minimize storage loss of large round bale

Although large round bales reduce labor requirement when putting up hay, storage losses with large round bales are generally much higher than with small rectangular bales, particularly when stored outdoors. This indicates that a lot of large round bales might have some nutrient loss from precipitation combined with air temperature and humidity. Much of the dry matter loss with outdoor storage is associated with microbial respiration under optimal moisture, temperature, and nutrient condition for microbes. The following are a number of ways to minimize large round bale loss stored outside:

1. Increase bale density: One of the most important ways to reduce round bale loss is to tighten the outer layer of bale. It's recommended to have a minimum density of 10 lbs. of hay per cubic ft.

2. Use covers: Weathering can reduce forage quality of round bale hay, particularly digestibility. Plastic wrap, net wrap, reusable tarps, or plastic twine can be used to prevent the loss from weathering. Plastic wrap or net wrap will result in less loss than twine.

3. Select a good storage site: First of all, the storage site should not be shaded and should have good air circulation, which will enhance drying conditions. The storage site also should be well-drained to reduce moisture absorption into the bottom side of the round bales. Ground contact can account for over half of the total dry matter loss. To elevate the bales from the ground use racks, fence posts, discarded pallets, railroad ties, used tires, or a layer of crushed rock about 4 to 6 inches deep to have good drainage.

4. Orient rows of bales to promote drying: It's recommended to stack large round bales in rows, buff end-to-end, give three feet between rows, and orient the rows in a north-south direction. Vegetation between rows should be mowed to allow good air flow.



Last Tomatoes of the Season



Cold nights are increasing in frequency now that we are into October. If you have tomatoes, you may have some that are approaching maturity. Leave them on the vine until mature or until a frost is forecast. Tomatoes will ripen off the vine but must have reached a certain phase of maturity called the 'mature green stage. Look for full-sized tomatoes with a white, star-shaped zone on the

bottom end of the green fruit. When harvesting fruit before a frost, separate tomatoes into three groups for storage: those that are mostly red, those that are just starting to turn, and those that are still green. Discard tomatoes with defects such as rots or breaks in the skin. Place the tomatoes on cardboard trays or cartons, but use layers of newspaper to separate fruit if stacked. Occasionally a tomato may start to rot and leak juice. The newspaper will keep the juice from contacting nearby or underlying fruit. Store groups of tomatoes at as close to 55 degrees as possible until needed.

What Beef Producers Should Start Thinking About

Tips by Dale Blasi, Extension Beef Specialist

Cow herd management for spring-calving cows

In late fall and early winter, start feeding supplement to mature cows using these guidelines:

- Dry grass — 1-2 pounds (lb.) per day of a 40% crude protein (CP) supplement
- Dry grass — 3-4 lb. per day of a 20% CP supplement
- Dry grass — 10 lb. good nonlegume hay, no supplement needed

Compare supplements based on cost per pound of nutrient.

Utilize crop residues.

Strip-graze or rotate cattle to improve grazing efficiency.

Cows in average body condition can be grazed at 1-2 acres per cow for 30 days, assuming normal weather. Available forage is directly related to grain production levels.

Limiting nutrients are usually rumen degradable protein, trace minerals and vitamin A.

Control lice.

General management

Document your cost of production by participating in Standardized Performance Analysis (SPA) programs.

Review management decisions; lower your costs per unit of production.

Check your financial management plan and make appropriate adjustments before the end of the

Time to Plant Spring-flowering Bulbs

Late September through October is an excellent time to plant spring-flowering bulbs such as crocus, tulips, and daffodils. These plants need to develop roots in the fall and must meet a chilling requirement over the winter in order to bloom in the spring.

Choose a planting site that has full sun to partial shade. The ideal soil would be a sandy loam, but even poor soils can be used if organic material such as peat moss, compost, or aged bark is mixed in. For example, a heavy clay can be amended by mixing in one-third to one-half organic material. Soil pH should be between 6.0 and 7.0.

Bulbs need good aeration as well as good drainage for proper development. It is best if the bulbs are given 12 inches of prepared soil. If one-third organic material were added, this would require mixing 4 inches of organic material with 8 inches of soil. Incorporate about 3 pounds of a complete fertilizer such as a 5-10-5 per 100 square feet during preparation or fertilize according to soil test.

Planting depths vary depending on the size of the bulbs. For example, tulips and hyacinths are set about 6 inches deep, and daffodils are put 6 to 8 inches deep. Smaller bulbs are planted shallower. As a rule of thumb, bulbs are planted two to three times as deep as their width. Planting depth is the distance from the bottom of the bulb to the top of the soil. Large bulbs are normally spaced 4 to 6 inches apart, and small bulbs about 1 to 2 inches. Planting in clumps or irregular masses produces a better display than planting singly.

After placing the bulbs at the proper depth, replace half the soil and add water. This will settle the soil around the bulbs and provide good bulb/soil contact. Add the remaining soil and water again. Although there will be no top growth in the fall, the roots are developing, so soil needs to be kept moist but not soggy. Mulch can be added after the soil has frozen to prevent small bulbs from being heaved out of the soil by alternate freezing and thawing.

Apply Late-Season Nitrogen Application in November

November is the time to give cool-season lawns the last nitrogen application of the season. Why November? Because while top growth slows in

response to cool temperatures, grass plants are still making food (carbohydrates) by photosynthesis. A November nitrogen application helps boost the

photosynthesis rate. Carbohydrates that are not used in growth are stored in the crown and other storage tissues in the plant. These carbohydrate reserves help the turf grass green up earlier in the spring and sustain growth into May without the need for early-spring (March or April) nitrogen. Those early-spring nitrogen applications are less desirable because they can lead to excessive shoot growth and reduced root growth. Other benefits of November-applied nitrogen for cool-season grasses include improved winter hardiness, root growth, and shoot density.

How much should you apply? One to 1 ½ pounds actual nitrogen per 1,000 sq. ft. of lawn area is sufficient. Following the recommended spreader

setting on the fertilizer bag should apply the correct amount of fertilizer. In order for this application to be effective, the nitrogen must be readily available to the plant, because the growing season is nearly over. Therefore, for a November application, use a soluble (quickly-available) nitrogen carrier such as urea or ammonium sulfate.

Many turf grass fertilizers sold in garden centers and other retail outlets also contain soluble nitrogen. Avoid products that contain water-insoluble nitrogen (slow-release) for this application. As always, sweep up any fertilizer that gets on driveways, sidewalks, or streets and reapply it to the lawn.

Garden Mums

As soon as garden chrysanthemums are done flowering, you may cut the plants back to 2 to 3 inches high. Some gardeners prefer to leave the top growth so that it provides some protection from fluctuating soil temperatures. If you choose to cut the tops off, apply a layer of mulch over the top of your mums after

the ground has frozen or if the forecast calls for a sharp drop in temperature. Mums should not completely dry out during the winter. It may be necessary to water occasionally if sufficient rain or snow has not fallen.

Late-Fall Insect Wheat Pest Update

Fall armyworms and armyworms are still active in wheat and can be for another month, depending upon the weather. If growing conditions are good, the wheat should be able to outgrow feeding damage caused by small worms. Large worms have probably caused most of their feeding damage already, and hopefully won't be able to pupate, emerge as adults,

lay eggs, and have those eggs hatch again this fall.

Winter grain mites may cause some concern in the next month or so, especially under dry conditions. However, insecticide applications are rarely warranted and these mites seldom impact wheat yields. As with worms, good growing conditions for wheat will mitigate winter grain mite feeding damage.

Be sure to like the “Marshall County Extension Service” Facebook page for timely information.

*"Agriculture is our wisest pursuit, because it will in the end contribute most to real wealth, good morals, and happiness."
- Letter from Thomas Jefferson to George Washington (1787)*