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District Extension Agent, Crops & Soils

Invasive Bluestems: Broomsedge

When we hear 'bluestem', it often conjures up images of waving prairie grasses. Unfortunately, there are other bluestem species much less desirable. One of those is our all too common Broomsedge Bluestem. If you've confirmed its identity in your grass stand, it's all too familiar to you. If you haven't, it's a good time to look across the stand for an orange or straw-colored grass that often sticks above our cool-season grasses. It will remind you of the aforementioned desirable prairie grasses, but it's really just an invader.

There's a statement in a USDA Plant Fact Sheet on Broomsedge Bluestem stating: *On infertile soils, broomsedge is a long-lived competitor.* That pretty well defines where we see broomsedge, and we've unfortunately got a lot of acres that fit into this category. However, it isn't necessarily a species that only survives in low fertility. Rather, it likes the open space created in cool-season forage stands often the result of low fertility. It can also get a foothold when stands are thinned by armyworms or heavy grazing pressure or even drought.

If you do determine you have broomsedge (if you're uncertain, reach out and we'll try to confirm it), a soil test is a great first place to start. Results of a 2008 study at the University of Missouri evaluating the response of cool-season grass (fescue) stands containing broomsedge to fertilizer showed that the addition of fifty pounds of phosphorous per acre, plus lime, increased fescue stand composition from less than 15 percent to over 35 percent while *slightly* reducing the broomsedge composition. In addition to phosphorous and lime, I'd take a hard look at potassium as well, as levels of this important nutrient continue to decline.

As you're waiting on a soil test, take a hard look at previous weather, harvest (grazing/haying) management, and other potential contributing factors. Anything that opens up space in the stand can allow Broomsedge Bluestem to get a foothold – and not look back.

If you are in need of additional recommendations for broomsedge management, drop me a line. Getting a stand back from a broomsedge infestation isn't easy or fast, but taking the first step is necessary to make progress.

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

National Scrapie Eradication Program

When the “cow that stole Christmas” situation happened, I was a new wet-behind-the-ears agent, but I clearly remember the effects that the confirmation of BSE had on cattle markets and management within the United States. A very similar neurological disease can be found in the Caprinae family of animals - Scrapie. With the changes in tags for official animal identification, it seems like a good time to revisit the “Scrapie tag” program today.

Scrapie is a fatal, degenerative disease affecting the central nervous system of sheep and goats. Since 1952 the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) has worked to control and eradicate this disease. In 2001, APHIS put into effect an aggressive National Scrapie Eradication Program (NSEP) to eliminate this disease from the United States. The NSEP is a mandatory program with requirements that apply to all sheep and goat producers.

Since this program’s inception, the prevalence of scrapie in adult sheep sampled at slaughter has been reduced by over 99 percent. The program regulations require the official identification of sheep and goats not in slaughter channels and any sheep over 18 months of age in interstate commerce, with a few noted exceptions. In addition, States are required to implement and enforce official identification of most sheep and goats on change of ownership intrastate, in order to move sheep and goat’s interstate with minimal restrictions. The basic components of this program for producers is to: 1) obtain a Flock ID from USDA 2) order your flock ID Scrapie tags and 3) tag livestock with these individualized tags before they leave your premises. First time participants in this sheep and goat identification program, may be eligible to receive 100 free tags. Kansas residents may contact the USDA office at: 785-228-6565. Additionally, it is recommended that Kansas producers obtain a Premises Identification Number (PIN) from the Kansas Department of Agriculture. This PIN number will be required if you intend to order RFID tags.

If you are not a first time participant or simply need additional tags, the Kansas Department of Agriculture - Animal Health Division, has updated guidance on how to order these tags directly from the manufacturer on their website: <https://www.agriculture.ks.gov/divisions-programs/division-of-animal-health> Tags come in metal, plastic and RFID forms. Keep in mind that the intent of these tags is to allow disease traceability back to the flock of origin, so your individualized tags should only be used in animals reared on your premises.

There is a voluntary, complementary program called the Scrapie Free Flock Certification Program (SFCP). The SFCP began in 1992 as a partnership between APHIS, the States, sheep and goat producers and allied industry. The SFCP provides participating producers with the opportunity to protect their animals from scrapie and to enhance the marketability of their animals through monitoring the animals for evidence of scrapie infection and, depending on the category of participation, certifying their animals’ origin in flocks or herds of negligible scrapie risk.

To reach the level of full eradication of this disease from the United States, every producer needs to take up their responsibility to help in identification of required animals through the “Scrapie tag” program. Extension agents can help producers navigate this program, in addition to the good references mentioned above. More information about this disease and programs surrounding it can be found at: <https://www.aphis.usda.gov/livestock-poultry-disease/sheep-goat/scrapie>

One final note for sheep and goat producers. The Northeast Kansas Sheep and Goat school has been scheduled for March 12, 6:00 pm in Troy, covering the topics of parasite and predator management for sheep and goat flocks. Please hold the date and contact the Extension office for registration information.

Laura Phillips
District Extension Agent, Horticulture

Grafting: What is it and why do we do it?

You may have heard of grafted plants, seen grafted plants for sale, or maybe you even have a grafted plant in your yard. But what is grafting? Grafting, in the plant world, means that you take two different plants and join them together into one plant. When grafting, you need a rootstock and a scion. The rootstock is the root system of a plant. The scion is the top part of a plant, including the stems, branches, and leaves. By joining a rootstock from one plant with a scion from a different plant, we can meld two plants into one.

Grafting is not just for the fun of getting two plants in one. It lets us have greater control over the characteristics of a plant. It can help farmers and gardeners increase their harvests, protect plants against diseases, and allows us to significantly alter characteristics of plants.

Horticulturists have been grafting plants for centuries and is more common than you might think. They are incredibly common when it comes to fruit trees. Many people want to grow fruit, but a standard size apple or pear tree will grow to about 20 feet tall. For most people, harvesting fruit 20 feet in the air is not feasible. So, fruit tree growers take the top of the fruit tree (the scion) and attach it to a rootstock from a smaller tree. Suddenly, the apple tree cannot get as big, but still produces apples. This is how we get dwarf and semi-dwarf varieties of trees.

There are many other reasons why you might graft a plant. Aside from changing the plant size, you can graft to improve disease resistance. Many plant diseases start in the soil. Growers may decide to take a desired plant and graft it onto a rootstock that is resistant to soil-borne diseases like verticillium wilt, fusarium wilt, and nematodes. Similarly, if a plant is not well adapted to the local climate, a grower may graft the plant onto a rootstock that is more drought or heat tolerant.

Recently, tomato grafting has gained more popularity. Right now, the K-State Olathe Horticulture Research and Extension Center (OHREC) is getting ready for their tomato grafting season. Each year OHREC grafts tomatoes for growers in the area. This year they plan to send out over 10,000 grafted tomatoes. If you are interested in learning more about plant grafting, you can visit the OHREC website to watch their videos on tomato grafting. You can also reach out to your local extension office for more information.

Teresa Hatfield
District Extension Agent, Family and Community Wellness

Shingles: A Painful Reality

If you have had chickenpox, you are at risk of developing shingles later on. Most people who were born before 1980 have been exposed to chickenpox, which is also known as the herpes zoster virus and is often considered a childhood disease. For those of us born before 1980, you probably experienced the virus as a child. I can thank my little sister for exposing me to the virus. For most people, chickenpox does not cause any serious complications.

So, if you have had chickenpox, you could develop shingles later in life. The virus that causes the chickenpox never really leaves your body. The virus goes dormant and lives in your nerve cells near your spinal cord and brain. It usually does not cause significant issues until something triggers the virus to become active again. When the virus becomes active again, the outbreak is known as shingles.

The risk of developing shingles increases with age, especially for people over 50, but people at any age can develop shingles after they have had chickenpox. Shingles triggers include high levels of stress, those with weakened immune systems, and age. Shingles commonly present as a painful rash, itching, burning, and tingling sensation isolated to one side of the body. Shingles can be very painful and can last for weeks or months. Shingles spreads to people not exposed to chickenpox through direct contact with the fluid from the skin blisters. If exposed, they can develop chickenpox. Severe complications of shingles can occur if the infected area is on the face and involves the eyes.

What can you do?

If you are over 50, getting vaccinated is the best way to protect yourself from shingles. The Shingrix vaccine is highly effective at preventing shingles. The vaccine is administered in two doses, with the second administered two to six months after the first. Even if you have already had shingles in the past, you can still benefit from the vaccine, which will reduce the chances of getting it again. Even if you believe you have never had chickenpox, healthcare professionals recommend you still get the vaccine. That is because almost all people born before 1980 have been exposed. You may have experienced such a mild case of chickenpox that you were unaware you had it, or you were too young to remember. The vaccine cost is free if you have a Medicare Part D plan.

If you do develop shingles, contact your healthcare provider. Some antiviral medications can help lessen the severity if you take early action.

If you have ever known anyone who has had shingles, you understand how painful and uncomfortable it can be. Shingles can produce long-lasting side effects on one's health and quality of life. The vaccine is a safe, proven way to reduce the likelihood of developing shingles. Ask your healthcare or pharmacist about the shingles vaccination.

Cindy Williams
District Extension Agent, Food, Nutrition, Health and Safety

High Price of Eggs—What to Do?

The hike in the price of eggs has some consumers scratching them off their shopping list. I have even heard the called “golden nuggets”. Here are some options to replace eggs in your recipes based on what function the egg is providing.

- Boiled egg---use 2 ounces extra-firm tofu for each hard-boiled egg.
- Binding ingredients in baking---For each egg, use 1 Tablespoon chia seeds or ground flax seeds with 3 Tablespoons water, let stand 5 minutes. This makes a gel and help hold ingredients together.
- Leavening in baking---Use the chia or flax seed mixture above plus ½ teaspoon baking powder for each egg.
- For moistness in baking---use ¼ cup applesauce, mashed banana, pureed avocado, pureed garbanzo beans, or silken tofu.

Still Time to Bake Valentine Cookies

There are thousands of cookie recipes in a variety of shapes, sizes, textures, and flavors. During this holiday season, cookies are a special treat and everyone has a favorite. Let’s see how a traditional chocolate chip cookie can be altered for a different look.

Chocolate chip manufacturers have made special holiday shapes. Simply replace the regular chips with some fancy chip. Try adding some frosting and colored sprinkles for extra sparkle.

To change the texture and color, try these tips:

For More Spread:

- Use butter
- Increase liquid 1-2 Tablespoons
- Increase sugar 1-2 Tablespoons
- Warm cold ingredients to room temperature, don’t refrigerate dough

For More Puff:

- Use shortening
- Use cake flour
- Reduce sugar a couple Tablespoons
- Use all baking powder
- Use cold ingredients or refrigerate dough

For More Tenderness:

- Use cake flour

Have fun creating an extra-special cookie for your next holiday event. It will be one-of-a-kind and designed for those special people in your life.