

David Hallauer District Extension Agent, Crops & Soils

Soybean Insects & Defoliation

From now through season's end, soybean insect pests will be commonplace. Some are just passing through. Some are feeding on pods. The ones we first often notice, however, are the foliar feeders – the ones that make the tops of the plants and edges of the field look rough.

Soybeans have a great ability to compensate for lost leaf area from insect feeding. Holes chewed in the upper canopy? You may just be allowing light to penetrate deeper into that canopy allowing inner leaves to increase photosynthetic rate – to help compensate for lost leaf material. It's not to say that we can always lose foliage and everything be just fine. Thin canopies can't tolerate as much feeding as denser ones; defoliation during reproduction is less tolerated than during vegetative growth; and good growing conditions allow for greater compensation levels than when plants are stressed - but the plant's ability for recovery is still great. Nebraska research has shown defoliation losses can reach almost 20 percent before treatment is warranted.

While 20 percent doesn't seem like much, defoliation levels are almost always over estimated. Damage doesn't occur evenly in the canopy, so make defoliation observations throughout the canopy to get an accurate idea as to how the *entire* plant is affected. Want to know what 20 percent looks like? Check out the 2023 KSU Soybean Insect Management Guide (page 2 online at <u>https://bookstore.ksre.ksu.edu/pubs/mf743.pdf</u> or available upon request from District Offices). If scouting, the University of Nebraska has some excellent scouting tips at: <u>https://cropwatch.unl.edu/2016/decision-making-soybean-defoliating-insects</u>.

It can take pretty high numbers of foliage feeders to reach the 20 percent leaf loss level where treatment might be needed, but pod feeding insects are a completely different story. Bean leaf beetles and stink bugs are already present in some fields. The damage they do, in addition to others like soybean podworm (corn earworm), can add up quickly. Scout for them now as well.



Ross Mosteller

District Extension Agent, Livestock & Natural Resources

When to Pull the Bull?

As I've opened some of my Dad/Grandpa's old calving books, the pages illustrate a 365-day calving window, my inference is that this is because bulls ran with the cows all year. This year-round calving system may be by design or simply a necessity given pastures and facilities, but a shortened calving window can have multiple benefits. This is most easily facilitated by removal of breeding bulls from pasture, often around this time of year for spring calving herds.

Cow-calf herds lacking a defined calving season are labor-intensive and potentially very inefficient. Significant management and marketing challenges, due to widely varied cow requirements and calf age/weight, also come without a defined calving/breeding season. Management for a short, specific calving period is an opportunity to reduce costs and optimize productivity of the cow herd. Deciding how wide the calving window will be and management of the bull following the breeding season, are major factors to consider up front.

To give cows multiple opportunities to conceive but also limit the number of cows calving late in the calving season, use breeding periods of 45 to 60 days. In most cases, this would result in cows having two to three opportunities to conceive during the breeding period. Keep in mind that most cows have an anestrus period of 30 to 90 days postpartum, so shortening the breeding window can result in lower cowherd pregnancy percentages. This can present marketing opportunities for females that don't conceive in a shortened window, either as feeder heifers, open cows or bred females (*with later bull exposure*). Current markets give incentives to all these classes of "non-productive" females for an operation.

Although short breeding periods can be highly effective, there are some biological limitations for how short the breeding period can be. Cows are only receptive to mating during estrus or "standing heat" (approximately 18 hours) once during an 18-24-day estrous cycle. Fertilization rates after estrus have been observed to be in excess of 95% in many studies, but a significant proportion of embryos fail to establish pregnancy past day 17. With this in mind, breeding periods that give cows a single opportunity to be serviced are discouraged, as this would result in pregnancy percentages that are impractically low for commercial production.

The process of separating bulls from the breeding herd can also come with challenges. This can be things such as pasture terrain, loading facilities, pens/pastures to hold bulls separate from the herd and labor, to name a few. Once the breeding season is over, producers usually turn bulls out to a separate pasture to regain lost weight and prepare them for the next breeding season. Mature bulls in good condition can be managed on pasture or an all-roughage diet without supplements. Young, growing bulls need a ration formulated to gain 1½ to 2 pounds per day depending on severity of weight loss during breeding. The need to supplement young bulls on summer/fall pasture will depend on the quality and quantity of forage available.

The benefits of managing for a short calving season are numerous. These may include reductions in labor costs associated with calving observation, decreases in calf mortality or morbidity, and opportunities for simplified herd management due to more uniform stage of production among cows. Additionally, management for an early-conceiving cow herd does maintain selection pressure for fertility. Aside from the immediate production value, this selection pressure has long-term genetic value if replacement heifers or herd sires are retained from within the operation. A good reference for this topic can be found in the University of Missouri's "Calving Season Considerations for Commercial Beef Cattle Operations".



Laura Phillips District Extension Agent, Horticulture

Brown Spots in Your Lawn

This time of year, many homeowners notice brown spots on their lawns. While there are many causes of discoloration in turf grasses, one common reason is a disease called Brown Patch. Brown Patch will affect all cool season turf grasses, making it one of the most widespread turf diseases.

Brown Patch causes roughly circular patches of, you guessed it, brown grass that can appear seemingly overnight. It can also cause tan lesions with black outlines on the individual blades of grass. Brown Patch is caused by a fungus known as *Rhizoctonia solani*. Our Kansas summers provide favorable conditions for Brown Patch, as it thrives in hot, humid weather.

Proper lawn care can prevent the appearance of Brown Patch or reduce its severity. When applying fertilizer, use only what the lawn needs, as excessive nitrogen from fertilizer will promote Brown Patch. Never fertilize when a Brown Patch is active. Avoid watering your lawn in the late afternoon or evening, as the water will not get a chance to evaporate before the sun goes down, allowing for moisture to stay on your grass longer. If the Brown Patch is severe, some home fungicides can fight Brown Patch. If your lawn has Brown Patch, start by practicing good lawn care, and reach out to our extension office for more care tips and fungicides available in your area.



Teresa Hatfield

District Extension Agent, Family and Community Wellness

Medicare Data Breach

On July 28, 2023, the Department of Health and Human Services (HHS) and the Centers for Medicare and Medicaid Services (CMS) reported a data breach on the corporate network of Maximus Federal Services, Inc. Maximum is a contractor to Medicare that works with Medicare appeals. The breach impacts over 612,000 and potentially up to 11 million individuals. The breach involves beneficiaries' personally identifiable information (PII). This information would include:

- Name
- Social Security Number
- Date of Birth
- Mailing Address
- Telephone Number, Fax Number, and Email Address
- Medicare Beneficiary Identifier (MBI) or Health Insurance Claim Number (HICN)
- Driver's License Number and State Identification Number
- Medical History/Notes (including medical record/account numbers, conditions, diagnoses, dates of service, images, treatments, etc.)
- Healthcare Provider and Prescription Information
- Health Insurance Claims and Policy/Subscriber Information
- Health Benefits & Enrollment Information

CMS and Maxius have begun to notify Medicare beneficiaries whose information was compromised. The notification in the form of a letter will provide information on the actions you can take to mitigate the breach's impact. CMS is offering impacted beneficiaries the opportunity to enroll in a free-of-charge credit monitoring service for 24 months. They encourage those affected to take the following steps:

- 1. Enroll in Experian Identity Theft and Credit Monitoring Services: Maximum will offer a free 24-month credit monitoring service. You will not be required to make payment for these services.
- Check Your Credit Report: You can check your credit for free once a year from all three credit bureaus, Experian, Equifax, and Transunion. You can request your report from <u>www.annualcreditreport.com</u>. Review the report for accuracy, and check for any incorrect information. Contact the credit bureau to report any discrepancies.
- 3. Continue to Use Your Existing Medicare Card: CMS reports that, at this time, they are unaware of any reports of identity theft, fraud, or improper use of information as a direct result of the incident. CMS states that if your Medicare number is impacted, a new Medicare number will be issued to you. You can also obtain a new Medicare card if you are the victim of indemnity theft. You will need to call Medicare at 1-800-633-4227 to request a new card. After receiving your new Medicare card, follow the instructions on the letter that comes with your card, and destroy the old card. You must also inform your healthcare providers that you have a new number.

Medicare beneficiaries should make it a habit to review their Medicare Summary Notice every quarter. Look for any suspicious claims or providers you did not see. Report any problems to your local Senior Medicare Patrol Program in the Meadowlark Extension District; report to Teresa Hatfield at 785-364-4125.



Cindy Williams

District Extension Agent, Family & Community Wellness

4-H Food Champions Share Winning Recipes

This year marked the 75th Anniversary of the Jefferson County 4-H Fair. For many years, I have asked food champion winners to share their "winning" food recipes with me and this year was no exception. This year's fair featured a braided bread that was entered by Greysen Correll of Denison.

Greysen is the son of Jacob and Samantha Correll and is a member of the Fairview 4-H Club. This is his 6th year in 4-H and is 12 years old. His bread was named Champion in Level 3 and later named Overall Grand Champion in Foods. His recipe is Easy, Perfect Yeast Bread. Now for his "winning" bread recipe:

Easy, Perfect Yeast Bread

1 cup lukewarm water	½ cup cooking oil
2/3 cup sugar	1 cup boiling water
2 pkg. active dry yeast	2 eggs
6 cups all-purpose flour	1 teaspoon salt

Mix together the following: lukewarm water, sugar and yeast; let set. In a large bowl, put two cups flour. Make a well in the center and add cooking oil and boiling water. Stir until it makes a smooth ball. Let the dough stand about 10 minutes. Then add eggs and salt and mix well. Now add the yeast mixture and mix. Add four cups flour, slowly stirring all the time. Knead dough and let rise until doubled in bulk. Make into dinner rolls, hamburger buns, cinnamon rolls or donuts. Let rise again until double in bulk and bake in 350°F oven about 30 minutes or until nicely done. Greysen chose to make into a braided loaf and baked it for 25-35 minutes.

Named as Overall Reserve Champion Food winner at this year's fair was a Lemon Blueberry Cake made by Creighton Lloyd from Topeka. He is the 16-year-old son of Tiffany Lloyd and is a 7-year member of the Prosperity 4-H Club of Valley Falls. His "winning" entry was named champion in Level 4 and later went on to be named Overall Reserve Champion Food product. His cake recipe includes the following:

Lemon Blueberry Cake

Cake ingredients:	
3 cups cake flour	½ cup canola oil
1 ½ cups granulated sugar	¾ cup buttermilk
1 Tablespoon cornstarch	2 Tablespoons lemon zest
2 teaspoons baking powder	1/4 cup freshly squeezed lemon juice
½ teaspoon baking soda	4 large eggs, room temperature
½ teaspoon salt	1/2 teaspoon vanilla extract
1/2 cup unsalted butter, softened and cut into	2 ½ cups blueberries
8 pieces	

Cake steps:

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- 1. Preheat oven to 350° and line three 8" round cake pans by lightly greasing and flouring the sides and lining the bottoms with parchment paper. Set aside.
- 2. In a large bowl, whisk together flour, sugar, cornstarch, baking powder, baking soda, and salt.
- 3. Using a mixer, add softened butter, one tablespoon at a time, adding the next one only after the first one is combined. The mixture will appear sandy in texture.
- 4. While mixing on low-speed, slowly drizzle in oil.
- 5. In a separate bowl, whisk together buttermilk, lemon zest, lemon juice, eggs, and vanilla extract until combined.
- 6. With mixer on low-speed, slowly drizzle in the buttermilk mixture until the batter is smooth and completely combined.



- 7. Use a spatula to stir in blueberries.
- 8. Evenly divide batter into prepared cake pans and bake for 30 minutes or until the surface of the cake springs back to the touch and a toothpick inserted in the center comes out mostly clean with a few moist crumbs.
- 9. All cakes to cool in cake pans for 10-15 minutes before running a knife around the edge of the pan to loosen cakes and carefully inverting onto a cooking rack to cool completely before decorating.
- 10. Once cooled completely, decorate the cake using Lemon Buttercream frosting.

Lemon Buttercream Frosting

1 cup butter, softened	¼ cup freshly squeezed lemon juice
1 heaping Tablespoon lemon zest	5 cups powdered sugar

Frosting Steps:

- 1. Add the butter, lemon juice, and lemon zest to a mixing bowl.
- 2. Mix on medium speed until thoroughly combined (about 2 minutes).
- 3. Scrape the mixture down from the sides before the next step.
- 4. Sift the powdered sugar
- 5. Add powdered sugar to the mixture.
- 6. Mix on low until sugar and butter and incorporated (about 30 seconds). Stop the mixer and scrape down the sides. Increase the speed to medium-high and mix for another 30-45 seconds until frosting is light and fluffy.