### Rolling Prairie Extension District
**Representing Chautauqua and Elk Counties**

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### Fall Treatment of Sericea Lespedeza

The late-bud stage through the bloom stage is a good time to spray sericea lespedeza. Dense stands of this invasive noxious weed need to be addressed with broadcast or aerial applications of labeled herbicides to start reducing stands. Scattered or sparse stands can be treated with spot spraying.

Remedy Ultra (triclopyr) and PastureGard (triclopyr + fluroxypyr) can be effective during the early to full bloom stage, but products containing metsulfuron (such as Escort XP, Cimarron Plus, Chaparral etc.) are often more effective as flowering ends and seed pods appear and begin to fill.

For aerial applications, Escort XP (metsulfuron) in the fall should be applied with a minimum of three gallons/acre spray solution. Add 0.25% non-ionic surfactant to 0.5 oz product of Escort XP. Chaparral (metsulfuron +aminopyralid) should be applied at 2.5 oz/acre beginning at flower bud initiation through the full bloom stage of growth. Aerial applications of Chaparral should be made with at least two gallons/acre spray solution. Dense or tall stands should be treated with five gallons/acre spray solution. Add 0.25-0.5% non-ionic surfactant when spraying Chaparral. Smooth brome and tall fescue may be suppressed or stunted by applications of Chaparral. Cimarron Plus (metsulfuron +chlorsulfuron) can be applied by air in a minimum of three gallons/acre spray solution at a rate of 0.625 oz/acre. Add 0.25% non-ionic surfactant and treat sericea lespedeza beginning at flower bud initiation through the full bloom stage of growth.

In ground applications, the same rates of Escort XP (0.5 oz/acre), Chaparral (2.5 oz/acre), and Cimarron Plus (0.625 oz/acre) as applied by air can be applied by ground applications using 10-20 gallon/acre spray solutions. Add a minimum of 0.25% non-ionic surfactant and treat sericea lespedeza through the full bloom growth stage.

Not all labels allow spot spraying. Always check labels for recommended rates and other precautions. For spot spraying, Escort XP can be applied at 1 gram/gallon of water or 1 oz/100 gallons of water. Add a non-ionic surfactant. Established stands of native grasses and smooth brome tolerate Escort XP, but tall fescue can be stunted. Chaparral can be applied for sericea lespedeza control during the bud to flower stage at a rate of 2.5 oz/100 gallons of water. Add 0.25% non-ionic surfactant to the Chaparral application. As mentioned earlier, cool-season grasses such as smooth brome and tall fescue may be stunted by Chaparral.

Sericea plants can be killed until frost, but if pod fill has begun, viable seed will still be produced. Grasslands with sericea lespedeza infesta-
tions should not be grazed or hayed after the sericea has gone to seed. This will only serve to spread the seed to other areas. If at all possible, keep sericea lespedeza from going to seed. Start planning now for follow-up treatment early next summer. Persistence is necessary to keep sericea lespedeza at reduced levels.

Testing Forages and What the Forage Test Means

This summer a lot of hay has been baled. However, the only way to know the quality of it or the nutritive value is to forage test. In the past you may have judged forage quality by color, odor, yield or other factors. To do this may be misleading, as these are not true indicators of quality and nutritive value.

Any feedstuff cannot be correctly utilized unless nutrient content is known. A forage or feed analysis is the only accurate way to determine the nutritional quality of your forage. A routine forage test costs $13.00 per sample. This includes an analysis of crude protein, moisture, dry matter, acid detergent fiber and calculated energy values. The reason to test the quality of your forage is so you can take the results and accurately balance a winter ration for whatever type of operation you have. If you do not know the quality of your forage or any of your feedstuffs, your cattle may not be getting the proper amount of nutrients, resulting in reduced performance. So whatever type of feedstuff you are going to feed, get an analysis done on it so you know what you have.

Below is a list of some common components analyzed in hay and a basic interpretation of each. Keep in mind that additional components can be analyzed for by request and/or for an additional cost. When your sample is returned, there will be two columns of numbers: “as sampled” and “dry matter.” As sampled reports nutrients in their natural state; this includes moisture. Dry matter reports nutrients with the water (moisture) removed. Results reported as dry matter allow for the direct comparison of nutrients across different feeds and often simplifies the ration-balancing process. Either can be used for ration balancing, but it’s very important to be consistent and use one or the other.

• Moisture: The optimum hay moisture ranges from 10 to 15 percent. Hay under 10 percent may be too dry, leading to brittle and dusty hay. Hays over 17 percent moisture have a high probability of molding (unless propionic acid is used), and hays over 25 percent moisture pose the threat of severe heat damage and serve as a potential fire hazard.

• Dry matter (DM): Amount of the sample left after the water (moisture) is removed.

• Crude protein (CP): A measure of the protein concentration in the hay. CP can range from 6 to 14 percent in grass hays (depending on nitrogen fertilization), 14 to 17 percent in mixed hays and 15 to more than 20 percent in legume hays.

• Acid detergent fiber (ADF): ADF primarily represents cellulose and lignin, the highly indigestible fractions of plant material. The lower the ADF value, the more digestible the nutrients in the hay are. Hays with ADF values of 30 to 35 percent are readily digested.

• Neutral detergent fiber (NDF): NDF is a measurement of the insoluble fiber. The higher the NDF, the less livestock will consume. NDF levels between 40 and 50 percent are good, while those above 65 percent will likely not be readily consumed.

• Relative feed value (RFV) or relative forage quality (RFQ): RFV and RFQ are commonly used when selecting quality dairy hay. Generally speaking, higher RFV and RFQ reflect higher quality, greater intake and digestibility.

• Fat (sometimes referred to as crude fat): This is a measure of fat content. Fat is an energy-dense nutrient and contains about 2.25 times the energy found in carbohydrates. Forages are typically low in fat.
• Total digestible nutrients (TDN): This is a measure of the total digestible nutrients in the hay or its energy value (may be used in place of DE, or offered in addition to DE), which may range from 40 to 55 percent.

As mentioned above, there are additional tests that may be desired and available at an additional charge.

Both Extension Offices have a hay test probe available for check-out to assist producers in sampling hay. I also have a computer program to assist you in working rations to see if they are balanced when feeding your cows. If you would like to run through some sample rations that you are planning on feeding to your cows this winter to see if it is balanced and going to do what you think it will, let me know.

Nitrates in Forages

Every year I get questions about the possibility of nitrates in forages. The only way to know for sure is to test the forage for nitrates. Drought-stressed forages may also be high in nitrates. Forages that contain high levels of nitrates also can cause animal sickness or death, though not as quickly as prussic acid poisoning. All livestock are susceptible to nitrate toxicity, but cattle and horses are affected most often. Crops such as forage sorghum, grain sorghum, sudangrass, sudan-sorghum hybrids, and pearl millet are notorious nitrate accumulators. Kochia, lambquarters, sunflower, and pigweed also are routinely high in nitrate. Under certain conditions, Johnggrass, corn, alfalfa, soybeans, wheat, and oats can also accumulate potentially toxic levels of nitrate. Nitrates normally accumulate in stems and conductive tissues. Highest nitrate levels occur in the lower third of the plant stalk. Concentrations tend to be low in leaves because nitrate reductase enzyme levels are high in leaves. Nitrates accumulate in plants during periods of moderate drought because the roots continually absorb nitrate, but high temperatures inhibit its conversion to amino acids. During a severe drought, lack of moisture prevents nitrate absorption by plant roots. Following a rain, however, the roots rapidly absorb nitrate and accumulate high levels. After a drought-ending rain, it requires 7 to 14 days before the nitrates will be metabolized to low levels, provided environmental conditions are optimum. The guidelines to reduce nitrates in forages include:

- When cutting drought-stressed sorghum for hay or silage, raise the cutter bar 6 to 12 inches to exclude basal stalks. This will minimize harvesting many weed species that have accumulated nitrate from shading.
- Delay harvesting until weather conditions have improved. A week to 14 days of favorable weather generally is required for plants to reduce accumulated nitrate.
- Never feed green chop that has been heated after cutting or held overnight.
- Harvest plants containing high levels of nitrate as silage rather than hay.
- Have representative samples of suspect forage analyzed before feeding.

High nitrate forages may be grazed, but a dry roughage should be fed first to limit intake. Stocking rates should not be too high because overgrazing forces cattle to eat the stems, which contain the highest nitrate levels. Cattle should be removed from potentially susceptible forage for 7 to 14 days after a drought-ending rain.

Lush regrowth of heavily fertilized grasses contains high nitrate levels and should not be grazed. When roughages are made into silage, fermentation normally reduces nitrate levels by 40 to 60 percent. Forages with extremely high nitrate levels at harvest may still be dangerous after ensiling and should be analyzed before feeding. If forages are harvested as hay, nitrate concentrations remain virtually unchanged over time. If plants are fed as green chop, the harvested forage should be fed immediately after cutting, not allowed to heat up. As the plants respire, nitrates are converted to nitrites, which are about 10 times more toxic than nitrates.

A lab analysis is needed to give precise nitrate levels. We can send samples to the K-State Soil Testing Lab for a nitrate test.
The purpose of this meeting is to provide information that will help land owners/managers identify and control the Old World Bluestems. The Caucasian and Yellow Bluestems are nonnative invasives that represent a threat to our rangelands.

Registration: 1:00 p.m. - 1:30 p.m.
Presentations: 1:30 p.m. - 3:30 p.m.

Cost: $5.00/person will be requested at the door for meeting and material costs.

To help us with materials and planning, preregistration is requested by Wednesday, August 19th by calling 316-321-9660; emailing dkehler@ksu.edu; register on-line by Google docs at http://tinyurl.com/q5lrltw

Speakers will include:

This meeting is being coordinated by K-State Research and Extension/Butler and Greenwood Counties and co-sponsored by: NRCS, Butler County Conservation District, Butler and Greenwood County Farm Bureau Associations and The Nature Conservancy.
Rolling Prairie 4-H
Serving Chautauqua and Elk Counties

4-H is a community of young people across America engaged in learning leadership, citizenship, and life skills. Caring adults that support our programs are essential for youth to achieve their potential based on the guidance, respect, skills, knowledge and wisdom adults can share. 4-H is a nationwide program. Each of the four H's of the clover represent ways youth can grow and develop. **Head**, critical thinking, problem solving; **Heart**, self-discipline, integrity, communication; **Hands**, serving others; and **Health**, choosing healthy lifestyles. In 4-H, youth have fun with a purpose!

Enrollment and Reenrollment for 4-H is on-line at [https://ks.4honline.com](https://ks.4honline.com)
New families may enroll now returning families can begin reenrollment on October 1, 2015

### Projects Available in 4-H

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**Let’s Reduce Salt Intake**

Too much sodium in your system causes your body to retain water. This puts an extra burden on your heart and blood vessels. In some people, this may lead to or raise high blood pressure. Having less sodium in your diet may help you lower or avoid high blood pressure. People with high blood pressure are more likely to develop heart disease or have a stroke.

Most people eat too much sodium, often without knowing it. One teaspoon of salt contains about 2,300 mg of sodium. Your body only needs 200 mg of sodium per day. All Americans should reduce the amount of sodium in their diet to less than 1,500 mg a day.

**What Foods Should I Limit?**

The best way to reduce sodium is to avoid pre-packaged, processed and fast foods, which tend to be high in sodium. Here are a few suggestions on what to limit.

- Salted snacks
- Fish that’s frozen, pre-breaded, pre-fried or smoked; also some fish that’s canned in oil or brine like tuna, sardines or shellfish
- Ham, bacon, corned beef, luncheon meats, sausages and hot dogs
- Canned foods and juices containing salt
- Commercially made main dishes like hash, meat pies and frozen dinners with more than 700 mg of sodium per serving
- Cheeses and buttermilk
- Seasoned salts, meat tenderizers and MSG
- Ketchup, mayonnaise, sauces and salad dressings

**How Can I Cook With Less Salt?**

- Avoid adding table salt to foods.
- Use herbs and spices to add flavor to foods. Fresh herbs provide more flavor than dried.
- Eat fresh lean meats, skinless poultry, fish, egg whites and tuna canned in water.
- Choose unsalted nuts and low-sodium or no salt added canned foods. Cook dried peas and beans.
- Use products made without added salt; try low-sodium bouillon and soups and unsalted, fat-free broth.
- Rinse canned vegetables, beans and shellfish to reduce salt.
- Sprinkle vinegar or citrus juice on foods just before eating. Vinegar is great on vegetables like spinach.

**ServSafe© Food Handler Training**

The ServSafe© Food Handler program delivers consistent food safety training to employees, consumers, and volunteers involved with the preparation and serving of food.

The training offers 5 key areas in:

- Basic Food Safety
- Personal Hygiene
Cross-Contamination & Allergens
Time and Temperature
Cleaning and Sanitation

Course includes a book and certificate that is valid for 3 years before having to renew. The class is $5 per student. Call or email for more information!

5 Playground Activities That Can Help Your Child’s Development

Playgrounds are more than just fun places for your child to spend free time. They can help all kids—especially those with learning and attention issues—develop important skills.

1. **Swinging** - Swinging is a basic playground activity that can aid your child’s development in many areas. It helps with balance and teaches him to know where his body is in space. And it also gives him practice with fine motor skills (gripping the chain), gross motor skills (pumping his legs to swing higher) and coordination (putting it all together). What’s more, swinging helps the brain learn to make sense of speed and direction, which may be beneficial for kids with visual-perception issues.

2. **Climbing** - Climbing playground equipment can help your child’s development. The same is true for climbing trees. Here’s why: In order to climb, your child needs to build an awareness of where his body parts are and what he can do with them. Climbing helps make him aware of directions (like up, down, left and right). Climbing also encourages problem solving and predicting what’s going to happen. For example, your child may wonder, “Where should my right foot go next? How will I get down from the top?” This kind of flexible thinking can help on the playground and in the classroom.

3. **Playing on Overhead Equipment** - Playing on overhead equipment, like monkey bars, helps your child develop both fine and gross motor skills. He’s practicing little movements (gripping the bar) as well as big movements (swinging from one bar to the next). Equipment like this is great for kids who have trouble with motor planning. Learning to move one hand at a time from bar to bar can help your child practice coordination and balance. He’ll also learn how to judge where the next bar is in relation to his body.

4. **Having Free Play** - Free play can mean anything from organized games to just running around with other kids. But it’s not just goofing around. Free play helps your child learn to communicate with other kids and practice conversation and vocabulary. Playgrounds can help him learn how to follow and change rules, share, and take turns as he makes up games with the other kids. These kinds of social interactions can also help your child practice picking up on social cues like body language and tone of voice.

5. **Playing Ball Games** - Games like kickball, tetherball, whiffle ball, and four square all help with kids’ development. As your child figures out how to hold on to, manipulate and throw or kick a ball, he’s practicing motor coordination skills. And as he develops strategies about where he should throw the ball or whether it’s time to run to the next base, he’s working on critical thinking and problem solving.

**Recipe:**

**Strawberry Shortcake**

9 servings

1 1/3 cups whole wheat flour
1 teaspoon baking powder
2 eggs
1/2 cup honey
1/3 cup butter
1 teaspoon vanilla extract
1/2 cup milk
4-5 cups of fresh, sliced strawberries

- Mix together flour and baking powder.
- Add in eggs, honey, butter, vanilla and milk. Stir well (or mix well with hand mixer).
- Pour into a well buttered 8x8 inch baking pan.
- Bake at 350° for 20-25 minutes.
- Allow cake to cool completely.
- Top with fresh strawberries

**Whipped Cream Topping**

- 2 cups cream
- Maple syrup to taste
- Whip cream until soft peaks form then add maple syrup.
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Rolling Prairie Extension District on Facebook

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