

David Hallauer  
District Extension Agent, Crops & Soils

**Tailgate Talk: Managing Invasive Bluestems (May 22, 2024)**

When you hear the term ‘bluestem’ mentioned when discussing grasses, your mind likely takes you to our common native species Big and Little Bluestem. Unfortunately, invasive bluestem species like Broomsedge Bluestem and Old World Bluestems have increased on our forage acreages as well. Their forage quality is poor and ability to take over is high, making control efforts a key to maintaining production in both cool AND warm season pasture systems.

These undesirable bluestems, along with other invading grass species have wreaked havoc on both cool and warm season forage systems on an increasing basis over the last decade plus. To help producers learn more about them, we’ll dedicate our first Tailgate Talk of the 2024 season to their identification and management.

Scott and Kelli Thompson will be our hosts for the Tailgate Talk scheduled for the evening of Wednesday, May 22, 2024, at their farm located at 18050 K-116 Highway, approximately seven miles east of the 16/75 Junction in Holton (north side of the Road - watch for signs; GPS Coordinates: 39.4627760545070, -95.61552510659). K-State Research and Extension Range Management Specialist Dr. Walt Fick and Area NRCS Rangeland Management Specialist Dustin Schwandt will team up to share information on how to tell the difference between the desirable bluestems and their less desirable counterparts. They’ll also share grazing, herbicide, and fertility management strategies to help combat them.

Plan to meet at the Thompson pasture for a light meal sponsored by the Jackson County Conservation District beginning at 5:30 p.m. with the program to begin at 6:00 p.m. We do request an RSVP to help us with a meal count. You can do so by contacting the Holton Office of the Meadowlark Extension District by *noon* on Monday, May 20<sup>th</sup> (785-364-4125) or by sending an e-mail to [dhallaue@ksu.edu](mailto:dhallaue@ksu.edu). In the case of inclement weather – or if you have further questions - contact us at the number/e-mail above for potential change of venue notices. Hope to see you there!

Ross Mosteller  
District Extension Agent, Livestock & Natural Resources

### **Quick Lesson in Getting Cows Pregnant**

Spring time for the spring calving cattle producer is one of the busiest and best times of year. There are many things that need to be done from delivering calves, to processing, to turning out on and managing grass. The focus this week will be to look at a process that lends itself to this ongoing cycle - reproduction. Specifically, talking about artificial insemination of cows. If you do not utilize this technology, I would encourage taking a look into the possibility of doing so. There is no better way to rapidly improve or use specific genetics in a cow herd.

When discussing timing of artificial insemination, standing heat (estrus) is often referenced. This is the period of time where estrus behavior of restlessness, congregation, swollen vulvas and most notably - mounting activity is observed. It is at this time where natural service occurs, but with artificial insemination (AI), the target time for insemination is nearer the end of standing heat. This is done to more closely align with ovulation, which occurs roughly 12 hours after standing heat ends. The duration of standing heat is somewhat variable at an average duration of 10-12 hours with a range of 6-24 hours.

For this very reason just detecting a cow in heat is not usually sufficient. For best conception results, one needs to know when the first standing heat occurred, because the ideal time to AI is 12 hours (plus or minus two hours) after that first standing heat. This is because ovulation occurs fairly consistently 24-26 hours after the onset of first standing heat. Identifying that first standing heat and using it as a guide for insemination timing will allow for maxim conception rates.

Typically, not knowing the time of first standing heat is why the old a.m./p.m. rule has been widely used. This has meant that if a cow is detected in heat in the a.m., inseminate her in the p.m. If a cow is detected in heat in the p.m., inseminate her in the a.m. This system works fairly well, when limited labor is considered. Also, keep in mind that much of the estrus behavior in the female is expressed in the very early morning or late night, so it can be difficult to accurately determine the first standing heat of the female without close supervision and/or heat detection aids.

Having said all this, why do we not inseminate near the time of ovulation? Sperm cells will live in the female reproductive tract from 18-30 hours. The viability decreases after 12-18 hours. The sperm cells must go through a process called capacitation - a term used to describe the changes undergone by the sperm cells in the female reproductive tract that allows for fertilization to occur. During this length of time, the weaker sperm cells die out. Also, the hormonal changes of the female after the last standing heat causes the reproductive tract to contract. This contraction process moves the semen up the tract to the oviduct, the site of fertilization.

This all takes time. The egg will only survive in the oviduct prior to fertilization for roughly 8 hours (or less). It's for this reason that the sooner after ovulation that fertilization takes place, the better. The ideal situation is to have the semen waiting on the egg in the oviduct. In natural service situations, bulls deposit a large volume of semen in the vagina of the cow during standing heat. Due to this large volume of millions of cells, there is a greater chance of sperm migrating to the oviduct. With the process of AI, only one-half or one-quarter cubic centimeter of semen is deposited in the uterine body. Because of the small volume of semen, timing is critical for fertilization to occur.

All of this reproductive timing for natural service or AI can be regulated with an estrous synchronization protocols, which allow the producer to have a better understanding of the estrous cycle of the female. To add to this, favorable results have been proven from protocols that incorporate a timed AI with estrous synchronization, as well as sexed-semen protocols. This can bring acceptable conception rates with little to no labor involved in heat checking. To learn more visit: <https://beefrepro.org>

Laura Phillips  
District Extension Agent, Horticulture

### **Squirrel Damage to Trees**

Tree squirrels can cause a couple types of tree damage. Most commonly they clip the tips of branches. The length of severed branches is often 2 to 3 feet though they can be longer or shorter. When squirrels snip off a branch, they cut it at about a 45-degree angle and the cut is rather tattered. This is a nuisance type of damage and normally does not harm the health of the tree.

More serious damage is caused when squirrels strip the bark off limbs or rarely, the trunk. Wounds can be quite large, and the squirrel can effectively girdle the branch by removing all the bark completely around the circumference. Branches girdled in this way will die and the tree may be ruined if those branches are major.

Why squirrels do this is still a bit of a mystery. Some people think it is simply a means to sharpen their teeth or that they are seeking nesting material or water. Other people think that there are certain squirrels that are high-strung and cause this damage out of nervous energy. If the damage is limited to snipping the ends off branches, it is probably best to ignore the activity as the tree suffers little harm. But if real damage is occurring due to extensive bark removal, try feeding and watering them. If that doesn't work, control may be necessary. Fox and gray squirrels are game animals and can be hunted in season where it is legal and safe to do so. They can also be trapped and moved away from the area where they are causing damage.

Teresa Hatfield  
District Extension Agent, Family and Community Wellness

### **Get the Proven Benefits of Physical Activity**

Many people, especially those with arthritis, don't exercise regularly despite the health benefits. Arthritis is a condition that causes inflammation in the joints. It affects millions of people worldwide, including over 52 million Americans. Arthritis causes joint pain, stiffness, and reduced mobility. The term arthritis covers more than 100 different conditions. The most common types of arthritis include osteoarthritis, rheumatoid arthritis, and fibromyalgia.

Osteoarthritis is the most common kind and affects the knees, hips, fingers, neck, and lower back. It occurs when the protective cartilage wears down over time. The severity depends on the person and can range from mild to severe. Healthcare professionals understand that cartilage health depends on movement. Motion delivers nourishment to the joints and eliminates waste products. Without motion, the joint cartilage will deteriorate.

Rheumatoid arthritis is a systemic autoimmune disease that affects the whole body. It causes inflammation of the lining of the joints and/or other internal organs. People with this type of arthritis experience tender, warm, stiff, and swollen joints. They will also experience fatigue. Rheumatoid arthritis typically affects many different joints throughout the body. People with rheumatoid arthritis need the proper balance of exercise and rest, especially during flares.

Fibromyalgia affects around 2% of the U.S. population. It means pain in the muscles and fibrous connective tissues (ligaments and tendons). Women are more likely than men to have fibromyalgia. Symptoms include moderate to severe fatigue, decreased exercise endurance, sleep disturbances, headaches, muscle aches, and tender points in specific body locations. Recent research suggests that exercise at an appropriate intensity (low to moderate) can be an important treatment for people with fibromyalgia.

The pain and stiffness associated with arthritis can become a barrier to starting a walking routine, and it is often difficult to know where to start. People with arthritis can benefit from regular physical activity such as walking. The Arthritis Foundation Walk with Ease Program was developed to help people with arthritis form walking groups whose goals are to safety and success. The program's three primary goals are:

- Educate about successful physical activity for people with arthritis
- Educate about arthritis management
- Provide an opportunity to begin and develop an ongoing aerobic fitness program

Groups will meet for six weeks, two times per week. Each session will last about an hour. At the beginning of the program, some people may only be able to walk for 5 or 10 minutes, but the program will help you gradually build up to at least 30 minutes of walking three times per week.

The Walk with Ease Program is designed for people with arthritis, but it is also suitable for people without arthritis who want to begin a regular walking program. You can participate if you can be on your feet for 10 minutes without increased pain.

#### **Arthritis Foundation: Walk with Ease Program**

Where: Woolsoncroft Event Center, 1615 Branch St., Seneca, KS

When: 10:00 AM to 11:00 AM

Dates: June 3, 7, 10, 14, 17, 21, 24, 28 July 1, 5, 8, 12

Cost: Free

To sign up, Contact the Meadowlark Extension Office at 785-336-2184 or register at <https://tinyurl.com/walk-with-ease-June>

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

### **Dealing with DOMS**

It is normal to feel sore after exercise; however, aches and pains should be minor. The gradually increasing soreness you often feel 24 to 48 hours later is called delayed onset muscle soreness (DOMS) and is a natural outcome of any physical activity.

Your muscles should burn a little when walking, and you should feel a bit sore a few days after doing strengthening exercises. You know you've done too much if soreness prevents you from performing daily activities or if excessive soreness lasts three days or more after exercise. Here are some tips to promote recovery after exercise.

- **Hydrate.** Water is the best way to hydrate during and after exercise. The easiest way to tell if you are dehydrated is by the color of your urine. It should be light yellow or clear within a couple of hours after exercise. If it is dark yellow, you need more hydration.
- **Fuel.** After exercise, have a snack that contains carbohydrates and protein. Good choices include yogurt and almonds, peanut butter with a banana, rice cakes, or whole-wheat pretzels. Eating the right foods after exercise will improve your energy level and help with recovery.
- **Circulation.** A light activity, such as an easy bike ride, light stretching, or slower walking, will stimulate blood flow and help you cool down after activity.
- **Compression.** A massage or use of a foam roller can help move inflammatory fluids out of muscles and help with sore or tight spots.
- **Rest.** Normal muscle soreness will peak about 48 hours after exercise and should be much better by the third day. This is why a rest day between strengthening exercises is recommended. If you want to do strengthening on consecutive days, alternate upper body exercise one day and lower body the next.