

Sunflower Extension District #6



April 2024

Sunflower Extension District

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Go to *www.sunflower.ksu.edu* for more details on these programs.

Inside Your Newsletter...

Residual Herbicides for Corn.....Crop Production page

Evaluating heifers before breeding.....Livestock page

Keeping Healthy and Safe......Family & Consumer page

Area Couple honored with the Kansas Master Farmer Award

Tim and Robyn Raile, Cheyenne County

With a rich farming history spanning six centuries, Raile Farms is a 100% certified organic operation growing winter wheat, winter durum, proso millet, irrigated corn and irrigated sunflowers.

When son Michael left Syngenta to return to the farm in 2011, he saw a need for a more holistic approach and helped introduce a transition to organic farming. The farm's main goals because soil stewardship and positive environmental impact.

As they researched potential crops for northwest Kansas, winter durum and proso millet had potential and the projected premiums. Now, Raile Farms is one of the only farms growing winter durum for commercial sale in the country. Additionally, their proso millet can be found in a variety of protein bars sold commercially.

The challenge of meeting the demand for a more diverse American diet while lowering their carbon footprint is a legacy Tim and Michael want to leave to the next generation. Tim and Robyn have participated in a variety of press and speaking engagements to advocate for organic farming.

Tim and Robyn have two children: Jessica and husband, Geiler, have two daughters, Rhen and Evian; Michael and wife, Ashley, have two sons, Cole and Brooks.



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Residual Herbicides for Corn

Residual herbicides that kill weed seeds/seedlings as they germinate or emerge are important for herbicide applications at or before corn planting. These herbicides can control weeds for several weeks, which prevents yield loss due to early-season weed competition. They can greatly improve the effectiveness of a post-emergence herbicide application and give more flexibility for post-application timing. Residual herbicides are also an important component of sequential herbicide applications later in the growing season. In general, preventing the emergence of weeds, especially herbicide-resistant weeds, is preferable to controlling them after they emerge.

Many cases of herbicide-resistant weeds have resulted from over-reliance on post-emergence herbicide applications, thus it is essential to include one or more residual herbicides available for corn. However, it is also important to remember to change residual herbicides to prevent the selection of tolerant or resistant weeds. The importance of this is reflected in the recent confirmation in other states of waterhemp and Palmer amaranth that are resistant to *S*metolachlor (Dual).

The specific herbicide you use is important, but it is usually less important than deciding to use a residual herbicide program that includes at least two effective herbicides. But, it is important to know the strengths and weaknesses of each product in terms of the spectrum of weeds controlled. A table summarizing weed species' response to various corn herbicides can be found on pages 25-27 of 2024 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland (SRP 1162) at: <u>https://bookstore.ksre.ksu.edu/ pubs/SRP1183.pdf</u>

Categories of Residual Herbicides for Corn

Photosystem II Inhibitors (Group 5). Atrazine is the most widely used PS II inhibitor in corn. It controls a wide variety of broadleaf weeds, including pigweeds, ragweeds, morningglories, and mustards, as well as some grass species. However, atrazine resistance has been reported for many weed species. Atrazine use rates are influenced by soil type, soil pH, and organic matter, and use is prohibited in instances where water contamination is likely. Unless your situation prohibits atrazine use, it is recommended to include atrazine when you apply HPPD-inhibitor and acetamide herbicides.

Very Long Chain Fatty Acid Inhibitors (Group 15). The main VLCFA products used in corn include acetochlor, *S*-metolachlor, metolachlor, dimethamid-P, and pyroxasulfone In general, these products are very effective in controlling most annual grasses (except shattercane) and small-seeded broadleaf weeds such as pigweeds. They are much less effective in controlling kochia or large-seeded broadleaf weeds such as cocklebur, devilsclaw, morningglory, sunflower, and velvetleaf. An exception is those products containing pyroxasulfone. Though resistance to Group 15 herbicides has been reported in corn/soybean rotations in Illinois, there have been no cases of weed populations in Kansas developing resistance to the Group 15 herbicides to date.

Group 15 herbicides are most effective when applied with atrazine. In past years, often because of cost, reduced rates of these products were applied to help manage heavy summer annual grass pressure, then followed up with a good post-emergence herbicide program. With the increased occurrence of glyphosate- and other herbicide-resistant weeds, it is essential to use the full rates of these products in conjunction with a POST program.

HPPD-inhibitors (Group 27). Examples of HPPDinhibitors are isoxaflutole (e.g. Balance Flexx) and mesotrione (e.g. Callisto and many generics). These products should be applied with atrazine. HPPD-inhibitors provide excellent for control of kochia, pigweeds, velvetleaf, and many other broadleaf weeds, as well as grasses. Corvus (thiencarbazone + isoxaflutole) will control shattercane and common sunflower better than Balance Flexx, provided the sunflower is not ALS-resistant. Keep in mind, products containing Balance should not be applied to coarse-textured soils when the water table is less than 25 feet below the soil surface. Balance Flexx does not provide adequate control of sunflower.

PPO-inhibitors (Group 14). Examples of PPO-inhibitors include flumioxazin (e.g. Valor) and saflufenacil (Sharpen). Herbicides containing flumiozaxin must be applied 7 to 30 days before corn planting. These herbicides provide excellent control of pigweeds; however, they are marginal on kochia. Fierce (flumioxazin + pyroxasulfone) will provide improved control of velvetleaf and kochia compared to Valor. The addition of atrazine will enhance kochia, pigweed, velvetleaf, and morningglory control, provided the populations are not triazine-resistant. Sharpen and Verdict (saflufenacil + dimethenamid-P) have excellent activity on pigweeds, kochia, and large-seeded broadleaf weeds. However, the length of residual activity can be shorter than other pre-emergence products when all are compared at full rates. Approximately 7 to 10 days of residual can be expected per 1 oz of Sharpen and 5 oz of Verdict.

ALS-inhibitors (Group 2). One example of a preemergence ALS-inhibitor used in corn is flumetsulam (Python), which only has broadleaf activity and provides good control of large-seeded broadleaf weeds such as cocklebur, sunflower, and velvetleaf, or the small-seeded common lambsquarters. Flumetsulam is also a component of Hornet, Stanza, SureStart II, and TripleFlex II. These products are especially effective for control of sunflower, along with cocklebur and velvetleaf, but less effective for morningglory control.

Rimsulfuron is another ALS-inhibiting herbicide that is a component of Basis Blend, Instigate, Prequel, Realm Q, and Steadfast Q. Products with rimsulfuron will provide short residual control of grass and broadleaf weeds and should be used as a setup herbicide with a good post-emergence weed control program. If ALS-resistant broadleaf weeds are present, these ALS-containing herbicides will be less effective.

The use of trade names is for clarity to readers and does not imply endorsement of a particular product, nor does exclusion imply nonapproval. Always consult the herbicide label.

The Ag Page

Cattle Chat: Evaluating heifers before breeding

K-State veterinarians say weight and reproductive maturity are two factors to assess

Walk through the halls of a high school and it is easy to see that not all kids develop at the same pace – some look like mature adults while others appear younger than their age.

Similarly, individual animals in a cattle herd also reach maturity at different times, say the experts at Kansas State University's Beef Cattle Institute.

"Most heifers reach puberty at 12-13 months of age; there are some Brahman-influenced breeds that are a little older when they begin cycling," said K-State veterinarian Bob Larson.

To help producers identify the heifers that are most likely to get bred early in the breeding season, Larson advises that producers complete a pre-breeding evaluation of the heifers.

"The two things that drive maturity are their age and their body weight," Larson said.

When Larson conducts the pre-breeding evaluation, he assesses their reproductive tract.

"As they get closer to puberty, their reproductive tract starts to feel more like an adult tract with a thicker, larger uterus and some follicle structures on the ovaries," Larson said.

He said there are two main times these evaluations are done.

"Six weeks before the breeding season, I can get an idea of the likelihood they'll be cycling at breeding, and I still have time to help that along with nutrition. The other time is when we are getting ready for a synchronization protocol and I can separate the ones that are not likely to get bred," Larson said.

Another factor affecting development is the amount of body fat heifers are carrying, which can be controlled by the heifer's diet. The experts agree that the easiest way to measure that is through weighing the heifers.

"As heifers grow, they start to deposit more fat in each pound of gain and less muscle. So when they get to about 60-65% of their mature weight, the hormones will signal to the body that it is time to ovulate," said K-State beef cattle nutritionist Philip Lancaster.

If these are retained heifers, Larson said, often producers will know a target weight that their females in the herd start to cycle. While it varies among herds, for many he said that is about 850 pounds.

Six weeks before breeding, Lancaster said producers can evaluate the heifer's body condition and adjust accordingly.

"We can safely increase their nutrition to get more energy in their diet to push them to gain 2-2.5 pounds per day. As long as we start 70-90 days before the breeding season, many of those heifers will reach puberty on time," Lancaster said.







Keeping Healthy and Safe



No one is immune to elder abuse — it can happen to anyone, at any time, and anywhere. Often a silent problem, elder abuse can rob older adults of their dignity and security and leave them feeling fearful, depressed, and alone. Sadly, 10 percent of Americans over the age of 60 have experienced some form of elder abuse in the last year, and many researchers expect this number to rise with the growth of the aging population.

Elder abuse is an intentional act, or failure to act that causes or is likely to cause harm to an adult. The six most common categories of elder abuse are described as:

Physical. Inflicting, or threatening to inflict, physical pain or injury on vulnerable elder, or depriving them of a basic need.

Emotional or Psychological. Inflicting mental pain, anguish, or distress on an elderly person through verbal or nonverbal acts.

Sexual. Non-consensual sexual contact of any kind or coercing an elder to witness sexual behaviors.

Neglect. Refusal or failure by those responsible to provide food, shelter, health care, or protection for a vulnerable elder.

Abandonment. The desertion of a vulnerable elder by anyone who has assumed responsibility for care or custody of that person.

Financial/Exploitation. Illegal taking, misuse, or concealment of funds, property, or assets belonging to a vulnerable elder.

The most common form of elder abuse in Kansas is financial abuse, and one of the common ways perpetrators carry out this abuse is through scams. Scams that target older adults are prevalent in today's world and can be financially devastating for high- and low-income victims. Determining the legitimacy of operations can be challenging because scam artists will work tirelessly to gain your trust and are skilled at persuasion. Before sending money or providing social security, account, or credit card numbers, you should talk with a trusted family member or friend to ensure its legitimacy. If their offer seems too good to be true, it probably is. The top 10 most reported scams targeting older adults are:

- 1. Telemarketing, phone, charity, or imposter scams.
- 2. Grandparent scams
- 3. Medicare or health insurance scams
- 4. Internet fraud
- 5. Funeral and cemetery scams
- 6. Sweepstakes, prizes, or lottery scams
- 7. Home repair or reverse mortgage scams
- 8. Investment schemes
- 9. Counterfeit prescription drug sales
- 10. Fraudulent anti-aging products

To prevent being a victim of a scam, use caller ID, screen calls from people you don't know, do not answer a phone call if the caller ID shows your own phone number (this is called spoofing), delete suspicious emails, and hang up on pushy telemarketers or salespersons. Also, be wary of sharing personal information. You can sign up for the Do Not Call Registry (donotcall.gov; 1-888-382-1222), though be aware that con artists may still access your information in other ways.

Coming in April - "Healthy Body, Healthy Brain" programing in the District. April 18th in Sharon, 29th in Goodland and 30th in St. Francis, all at Noon.





Important Dates:

April 20: Last Day to <u>Order Market Beef DNA Envelopes</u> for Nominations May 1: <u>Market Beef Nominations Due</u> June 5: Last Day to <u>Order Small Livestock DNA Envelopes</u> for Nominations June 15: <u>Commercial Heifer, Swine, Sheep, & Meat Goat Nominations Due</u>

Fly Into A Fun Project Learning Day



Where: Wallace County CAB Building

When: April 27, 2024 from 8:30 AM-12:00 PM MT

Cost: \$10.00

Choice of Projects: Painting, Fishing Lures, Leathercraft, Bath Bombs, Baking, Calf Care

Can register online, or drop by the office at 118 N Gardner St Sharon Springs, KS to sign up Contact us at 785-852-4285 or wbenisch@ksu.edu or mdaily@ksu.edu for any questions

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Presetts Questions Click (Select Projects) to add additional projects to the member's enrollment.	





Sherman County Small Animal Weigh-In Monday, April 22, 2024 from 5:00 PM - 7:00 PM MT (weather permitting) Cheyenne County Small Animal Weigh-In Wednesday, April, 24, 2024 from 6:00 PM-7:00 PM CT (weather permitting) Wallace County Small Animal Weigh-In Sunday, April 28, 2024 from 4:00 PM—6:00 PM MT

(weather permitting)

For any questions about the small animal project, please contact your Extension Office. 4- H members must be enrolled in the project prior to the weigh-in date, or the project will show in open class.

4-H Horse Show Judges Seminar Submitted by Kelsey Nordyke

Kansas 4-H, Colby Community College, and the KSU Horse Judging Team are pleased to offer a Kansas 4-H (and open) Horse Show Judges Seminar Friday, April 12th, at the Colby Community College School Farm (2002 County Road 23, Colby, KS).

The seminar will cover basic horse show classes, professionalism of judges, hands-on demonstrations with live classes, and a rule book exam. It is open to youth who want to increase their horse judging skill, adults who want to begin judging horse shows, or current judges who want to brush up on their skills.

Registration fee will be \$50 and covers lunch, instruction, and the rulebook. A link for registration will be emailed in the coming week.

For more information, contact Kelsey Nordyke (klnordyke@ksu.edu).



National Volunteer Week April 21– 27





http://www.facebook.com/sunflowerextensiondistrictcheyennecounty4h http://www.facebook.com/sunflowerwallace https://www.facebook.com/sunflowerextensiondistrictshermancounty4h/

New 4-H policy Guide: https://www.kansas4-h.org/resources/policy-guide/Kansas%204-H%20Policy%20Handbook%202023.pdf

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April 2024



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		2.	3. Foods 3:30 - 5:00 MT 4-H Building	4.	5. SH JR Leader Scholarship Due	6.
7.	8.	9.	10.	11.	12. Sunflower District Regional 4-H Day 5:30 PM MT Harvest E-free Church	13.
14.	15.	16.	17.	18. WA- Healthy Body Healthy Brain	19.	20.
21.	22. SH-Small Animal Weigh-In	23.	24. CN- Small Animal Weigh-in	25.	26.	27. WA-Project Learning Day
			unteer week	April 21– 27		
20. WA -Small Animal Weigh-In	29. SH- Healthy Body Healthy Brain	CN-Healthy Body Healthy Brain				



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