Walk Kansas: Walk 56 in 56  
March 26, 2023 - May 20, 2023  

It’s a wrap...Walk 56 in 56 is officially in the books for 2023. Congratulations! Now the journey towards better health and fitness continues.

Please see below the top finishers for various categories:

**Miles walked:**
- Catch Me if You Can-sas - 718 miles
- McPherson FUMC - 616 miles
- Holy Walkamolies - 599 miles

**Glasses of Water:**
- Catch Me if You Can-sas - 1093 glasses
- Holy Walkamolies - 741 glasses
- The Long Walkers - 714 glasses

**Cups of Fruits & Vegetables:**
- McPherson FUMC - 448 cups
- The Long Walkers - 406 cups
- Catch Me if You Can-sas - 353 cups

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CANTON

2030 ● 2030 ● 2030 ● 2030 ● 2030 ● 2030

**Tuesday, June 27, 2023 at 6:30 PM**  
Canton Community Building

In April, the Canton City Council voted to move forward with a revitalization program for the City of Canton. We are excited to kick off this initiative with the City of Canton to spur growth and revitalization. Our kick-off on June 27th will be a facilitated session with representatives from the McPherson County Extension Office and the K-State Community Vitality Group. Through this session we will be going through the process to start developing a strategic plan for the City of Canton. This will be our first step to help identify a plan to address the short term, mid-term, and long-range projects that will take Canton to 2030 which will be the town’s 150th Anniversary.

Come ready to share your ideas, vision, goals, wants, needs as we begin this journey to Canton 2030. This program will only succeed through the commitment and involvement of the entire community.

*It’s your community, you get out of it what you put into it.*

The purpose of the First Friday e-Call is to increase the local community’s knowledge of the experts, education, and economic resources available to help small businesses and entrepreneurs and to share innovations in community development.

Registration link:  
[https://www.ksre.k-state.edu/community/business/entrepreneurship/#sign_up](https://www.ksre.k-state.edu/community/business/entrepreneurship/#sign_up)

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First Friday e-Call

K-State Child Care Resources and Assessment for Your Community  
(Broadford Wiles, Associate Professor and Extension Specialist)

Join Us June 2, 2023  
9:30am

Register Today  
[https://ksre-learn.ecall](https://ksre-learn.ecall)
Teach & Taste – Ice Cream In A Bag

I scream, You scream, We ALL scream for Ice Cream!

That’s right, we will continue our series on recipes from the My Hometown: Kansas 365 Calendar. This recipe will continue as HANDS ON as each participant will get to make their own Ice Cream In A Bag. We look forward to seeing you June 14, 2023 at 6:30pm at the Extension Office.

Use the link below to register and come join us and try out a new recipe.

This recipe is...
Gluten Free (option available)
Vegetarian (option available)

Registration link: https://tinyurl.com/TeachandTasteJune

Mark Your Calendar: June 14, 2023 at 6:30pm at the Extension Office for Ice Cream In A Bag!

First, you’re in a crisis. Crisis doesn’t just mean thinking about ending your own life. It’s any painful emotion and anytime you need support. So, you reach out to a volunteer Crisis Counselor.

Your opening message can say anything. Keywords like “HOME,” “START” and “HELLO” just help us identify how people hear about us.

The first two responses are automated. They tell you that you’re being connected with a Crisis Counselor and invite you to share a bit more.

The Crisis Counselor is a trained volunteer, not a professional. They can provide support, but not medical advice.
Monday, June 12 and Wednesday, June 14 from 1:30 -4:30 pm each day.
Two 3-hour live sessions of online Grant Writing Training

You will learn:
• To conquer your grant writing fear and start writing
• Sources of data for community needs
• Where to find grants
• Practice writing the grant elements: Problem, Outcomes, Activities, Evaluation and Budget

As of 12/15/22, K-State Research and Extension has taught 76 in-person and virtual workshops to 2146 people. The 35% who responded to a follow-up survey reported bringing $38 million into their communities within one year of taking the workshop.

In 2021, we took the workshops ONLINE in two 3-hour live sessions. The workshops are hosted and promoted by local extension agents, but anyone is welcome to join - from anyplace on the globe.

County Connection E-News
To register to receive updates on upcoming events, calendar updates, webinars, senior and military discounts available, county resource phone numbers, as well as tips and tricks to make life easier.
It is OFFICIALLY summer and we are excited! We hope your summer is going to be packed with fun and excitement and of course, a little hard work on finishing up projects, fair will be here in the blink of an eye! We are excited to announce we have THREE interns joining us this summer: Mia Birkes and Colt Hahn are the 2 new faces joining us from K-State and our very own Reiley Bartel will be joining us as well! Make sure to stop in and say hello to them.

McPherson 4-H Fair
4-H Fair Books will be available in print and online in the coming weeks. Save the dates of July 21-24 for fair activities!

HELP NEEDED
4-H Fair Junior Superintendents/Judges Helpers needed! Please call or e-mail the office with what divisions you could assist with!

McPherson County Fair
The McPherson County Fair is held in Canton each year prior to the 4-H Fair. There are 4-H and Open Class Divisions that are a great way to get projects finished and out before the 4-H Fair! You might even get some great feedback! Check out all the Fair has to offer July 12-16.

Family of the Year Nominations
Each year every club has the opportunity to nominate a family for the "Family of the Year" award. We have LOTS of deserving families that volunteer time and energy to the McPherson County 4-H Program and to their club. So, let's recognize them! Award nominations are due to the Extension office by August 3rd. You can find the "Family of the Year" nomination sheet on our website at: https://www.mcpherson.k-state.edu/

Remember there are other award nominations as well that will be coming up later in the fall as we get closer to the Achievement Banquet.

Get Published
Have project news or reports of fun 4-H happenings? Please email or bring in any articles to Lauralee at Lhelm@ksu.edu by June 23 to get them into the Clover Corner!
A number of insecticides are labeled for use against bagworms including those with the following active ingredients (common trade names are in parentheses): acephate (Orthene), Bacillus thuringiensis subsp. kurstaki (Dipel), cyfluthrin (Tempo), lambda-cyhalothrin (Scimitar), trichlorfon (Dylox), indoxacarb (Provaunt), chlorantraniliprole (Acelepryn), and spinosad (Conserve). Most of these active ingredients are commercially available and sold under various trade names or as generic products. Several insecticides, however, may not be directly available to homeowners.

The key to managing bagworms with insecticides is to apply early and frequently enough to kill the highly susceptible young caterpillars feeding on plant foliage. Older caterpillars that develop later in the season are typically more difficult to kill with insecticides. Moreover, females feed less in August as they prepare for reproduction, which reduces their susceptibility to spray applications and any residues. The bacterium, Bacillus thuringiensis subsp. kurstaki, which is sold under various trade names, is only active on young caterpillars and must be consumed or ingested to be effective. Therefore, thorough coverage of all plant parts and frequent applications are required. The insecticide is sensitive to ultra-violet light degradation and rainfall, which can reduce residual activity (persistence). Spinosad is the active ingredient in a number of homeowner products, including: Borer, Bagworm, Tent Caterpillar, and Leafminer Spray; Captain Jack’s DeadBug Brew; and Monterey Garden Insect Spray.

The insecticide works by contact and ingestion; however, activity is greatest when ingested by bagworms. In year’s past, homeowners that have made weekly applications in late May and early June, thus, having killed nearly 100% of the bagworms on arborvitae and juniper shrubs. Consequently, the plants looked aesthetically pleasing during the season. Again, thorough coverage of all plant parts, especially the tops of trees and shrubs, where bagworms commonly start feeding, and frequent applications are essential in achieving sufficient suppression of bagworm populations. The reason multiple applications are needed is that bagworm eggs do not hatch simultaneously but hatch over a certain period of time depending on temperature, and young bagworms can ‘blow in’ (called ‘ballooning’) from neighboring plants on silken threads. If left unchecked, bagworms can cause significant damage and ruin the aesthetic quality of plants. In addition, bagworms can actually kill plants, especially newly transplanted small evergreens, since evergreens do not usually produce another flush of growth after being fed upon or defoliated by bagworms.

Be on the LOOKOUT for Bagworms

It is now time to be out looking for bagworms. In June, bagworms will be present throughout Kansas feeding on broadleaf and evergreen trees and shrubs. Now is the time to initiate action against bagworms once they are observed on plants. Bagworms are primarily a pest of conifers; however, they have expanded their host range to include a number of broadleaf plants, such as; rose, honey locust, and flowering plum. It is important to apply insecticides when bagworms are small to maximize effectiveness and subsequently reduce plant damage.

Farmers market opening day will be Saturday, June 3, 2023 and will run every Saturday from June 3rd to the 28th of October. It is located at 710 W. Woodside in McPherson. Doors of the blue, round-top Chief's building will open at 8:00 AM and the Market closes at noon. It is a Farmer’s Market made up of gardeners, bakers, artists, florists and beekeepers. Everyone has a passion for bringing fresh produce and homemade items to the public. The Market will have many products available for purchase: like, fresh herbs and vegetables, sweet and savory baked goods, jams and jellies, honey, pecans, meat, eggs, cut flowers, and arts & crafts. Plan now to visit the Farmer’s Market each Saturday for home grown / homemade items.
Effects of high temperatures on wheat  
Romulo Lollato, Wheat and Forages Specialist KSRE

Both daytime high and nighttime low temperatures were extremely high across parts of Kansas during a few days in the second week of May, with as many as 12 hours above 82°F accumulated on May 8 alone. The daytime high temperatures during this period sometimes exceeded 96°F. These temperatures occurred when much of the state’s wheat crop was either in the heading or flowering stages, which was concerning and unfortunately is resulting in many symptoms of heat stress.

Wheat is generally sensitive to unusually high temperatures at nearly every stage of growth, being more sensitive in the reproductive stages than in the vegetative stages, and becoming less sensitive as it progresses from flowering to late grain fill (after soft dough stage of development) and physiological maturity.

One of wheat’s most sensitive stages to heat is anthesis (flowering). The optimum temperature for wheat from flowering to grain fill is about 54 to 72°F. The longer the period of high temperatures and the higher the temperatures during reproductive stages, the more serious the potential yield loss. Temperatures above 82°F immediately prior to anthesis can greatly reduce pollen viability, thus reducing grain number and consequently grain yield.

Another unfortunate factor worsening wheat’s response to heat stress this year was soil moisture. Air temperatures do not necessarily correspond to temperatures within the wheat canopy. Plants can cool themselves by about 2 to 3°F when soils are moist. On the other hand, heat stress is often worsened by drought stress. We might expect the impact of the heat stress will be worse in areas where there is little or no soil moisture, which was the majority of the state’s conditions during May 8, 2023.

Summary:

It is hard to put a number of the potential yield damage due to heat stress, as it depends on many factors such as the stage of crop development during heat stress (different tillers and different kernels within a head will be at different stages of development), actual temperatures within the wheat canopy, and especially on grain-filling conditions following this heat wave.

If the period of high heat damaged pollen viability, disrupted pollination or caused kernel abortion, the effect on grain yields can be significant and irreversible, especially if grain fill conditions continue warm. Cool temperatures, especially nighttime temperatures, for the upcoming 3 to 4 weeks would normally help the crop compensate by lengthening the grain fill period, kernel weight, and the number of kernels per spikelet – if the heads were successfully pollinated. If the extreme heat occurred before pollen formation, pollen viability should be unaffected but shortening of the critical period could reduce yield. If the wheat had already successfully been fertilized at the time of the heat stress, grain yield could be reduced by reduced grain growth, but the actual effect on grain yield will depend greatly on whether the remainder of the spring is cool and moist.

Crop options after early terminated wheat  
Ignacio Ciampitti, Farming Systems KSRE  
Sarah Lancaster, Weed Management Specialist KSRE

Cropping options to follow an early terminated wheat crop could be similar to those for full-season crops. At this point in the season, viable crop options are still corn, soybeans, and sorghum.

Regardless of which crop you choose to plant, weed control will likely be needed. Despite insufficient precipitation to produce a crop, many fields will still have emerged weeds and all fields will have a weed seed bank likely to emerge and compete with the summer crop. In addition, any remaining wheat will need to be terminated. Burndown of summer annual weeds present at planting is essential for successful double-cropping. Glyphosate will be effective for terminating wheat, but if glyphosate-resistant kochia and/or pigweeds are present, alternative treatments such as paraquat may be required.

General agronomic considerations, herbicide carryover, and weed management will be addressed for each crop in the following sections:
Corn:
In some regions, planting corn later can move critical corn growth stages around pollination to later in the growing season, after the most intense heat. This strategy has been adopted by some growers in areas that often encounter heat and moisture stress during the growing season, even though crop insurance cutoff dates for planting corn may be too early for this practice. However, in many dryland conditions, planting date is not a very good predictor of corn yield in fields with lower yield potential (<200 bu/a).

Hybrid relative maturity and target seeding rate can be like earlier planting dates until the month of June. Fertilization focusing on nitrogen (and other nutrients as needed based on soil testing) is still a critical practice to increase the likelihood of high attainable yields. If planting is delayed, longer maturity hybrids will be a good option to produce biomass for silage and grain, if they can reach maturity before a hard freeze.

Depending on application date, herbicide rate, and soil and environmental conditions, carryover of Group 2 herbicides such as chlorsulfuron (Glean, others), metsulfuron (Ally), sulfosulfuron (Outrider, others), triasulfuron (Amber, others) will be a concern. If Beyond was used in Clearfield wheat, Clearfield corn hybrids will allow replanting at any time, otherwise, the rotation interval is 8.5 months. If Aggressor was used in CoAxium wheat, the interval is 120 days.

If grassy weeds such as downy brome have become established in wheat, control prior to planting will be very important. However, they will likely be controlled by glyphosate or atrazine used to terminate wheat. Using a Group 1 herbicide such as clethodim (Select, others) or quizalofop (Assure, others) to terminate wheat will prevent corn planting, as these products have rotation restrictions, as mentioned for Aggressor. In addition to atrazine, residual herbicides such as mesotrione (Callisto, others) and Group 15 products (S-metolachlor, Dual; acetochlor, Harness; dimethenamid-P, Outlook; or pyroxasulfone, Zidua) should be used and can be included in the burndown application.

Soybean:
Soybean is a very good alternative crop. A dense soybean canopy may reduce herbicide costs compared to leaving the field fallow. Still, a residual herbicide should be applied at or before, or at planting time.

From a variety selection, planting a variety with the same or perhaps even slightly later maturity rating (compared to a typical planting date) will allow the crop to develop a larger canopy before flowering. Planting a variety that is too much later in maturity, however, increases the risk that the seeds may not mature before frost, especially if long periods of drought slow growth. The goal is to maximize the length of the crop's growing season. The earlier you can plant, the higher the yield potential of the crop if moisture is not a limiting factor. From a fertilization standpoint, a soil test before wheat termination is recommended. Seeding rate can be similar to that for early planting dates, and row spacing could be narrower (15-inch or less), if this is an option with the available planting equipment. Narrow rows also offer the benefits of increasing early-season light capture, suppressing weeds, and reducing erosion.

If Group 2 herbicides are in the sulfonyl urea family and have the potential to remain in the soil after harvest. If an herbicide such as chlorsulfuron (Glean, Finesse, others) or metsulfuron (Ally) has been used, the most tolerant double crop will be sulfonyleurea-resistant varieties of soybean (STS, SR, Bolt).

Chemical control of pigweeds at or before plating is especially important for soybeans. Dicamba (XtendiMax, Engenia, or Tavium) or 2,4-D (Enlist) can be used to control emerged pigweeds if soybean varieties with corresponding herbicide resistance traits are planted. Dicamba may also provide a bit of residual activity for pigweeds and kochia. However, a residual herbicide program that includes multiple effective active ingredients is important. Herbicides to consider include metribuzin, Group 14 herbicides (flumioxazin, Valor; sulfentrazone), and Group 15 herbicides listed previously.

Sorghum:
Sorghum is another crop option with optimal planting time usually around late May and early June for late-maturing hybrids. Seeding rate and row spacing are similar to those recommended in normal planting dates (see recent Sorghum management eUpdate article). For N fertilization, a key component for the estimation of N application rates is the yield potential. It is also important to consider potential residual N from the wheat crop, mainly under the current conditions of very low production for wheat.

Sorghum will also have rotation restrictions to Group 2 herbicides. Igrowth hybrids are tolerant of imazamox (Beyond); however, current herbicide labels do not address rotation restrictions for these hybrids. Similarly, the Aggressor herbicide label does not address rotation restrictions for Double Team hybrids, which are tolerant of quizalofop.

Weed control before planting is critical for successful grain sorghum production. Both a thorough burndown program and an effective residual herbicide program is needed for both grasses and pigweeds to preserve double-crop sorghum yields. Using atrazine and a Group 15 herbicide product at planting is highly recommended for successful double crop sorghum production. One important difference from other crops discussed is that pyroxasulfone (Zidua, others) is not labeled for use in grain sorghum. Herbicide-tolerant grain or forage sorghum hybrids will allow the use of additional herbicides (imazamox, Imiflex; quizalofop, First Act; nicosulfuron, Zest) that are effective on summer annual grasses, but have little to no activity on pigweeds.

Cover Crops:
Less information is available regarding the herbicide carryover potential of wheat herbicides to cover crops. There is little or no mention of rotational restrictions for specific cover crops on the labels of most herbicides. However, this does not mean there are no restrictions. Generally, there will be a statement indicating “no other crops” should be planted for a specified amount of time, or that a bioassay must be conducted before planting the crop.