



Lyon County

K-STATE RESEARCH AND EXTENSION NEWS

lyon.k-state.edu

July/August 2019

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Farewell Reception

As many of you are aware, after more than eleven years as the Lyon County Extension Agent for Family and Consumer Sciences and a couple of additional years prior as a program assistant, Rhonda Gordon has decided to leave the Lyon County Extension Office. Rhonda has been active with many community organizations and has helped raise awareness of Extension activities locally.

We invite you to join us in a farewell gathering for Rhonda to thank her for her years of service. The gathering will take place on Tuesday, August 20, 2019 from 4 to 6 pm in the Extension Office meeting room. Light refreshments will be available.

Please join us on August 20 to wish Rhonda the best in her future endeavors!

It's Your Chance to Serve!

If you are interested in serving or becoming more involved with Extension work, please consider serving on the Lyon County Extension Council. The Council is made of 24 members with six each serving on one of four Program Development Committees (PDC's): Agriculture and Natural Resources, Family and Consumer Sciences, 4-H Youth Development, and Community Development. The Program Development Committees provide guidance for county Extension programming.

In Lyon County, the Extension Council is elected in an at-large election. Extension Council members are elected to a 2-year term and may be re-elected once (total of four consecutive years) before they must sit out for a year. Twelve Extension Council members are elected (or re-elected) annually and represent one of the four Extension programming areas.

All citizens of voting age are eligible to be candidates and vote in the at-large elections. The public annual election meeting is held not earlier than September 1, but not later than ten days before the annual meeting of the council.

The date for the 2019 Lyon County Extension Council Elections has not been set yet, but has generally been in early October from 7:30 a.m. to 5:30 p.m. and will be held at the Lyon County Extension Office, 2632 W Hwy 50 in Emporia.

Please contact us by Friday, August 30, 2019 to let us know if you are interested in having your name on the ballot!

The Clover Connection



Congratulations Seniors!



Congrats to the 16 high school seniors in the Lyon County 4-H program. We wish them all the best of luck in their futures! Senior 4-Hers include: Allie Houston, Ashlyn Alingh, Bailey Kurzen, Cody Cannon, Courtney Richardson, Emma Miller, Jack Creager, Jaimee Foster, Kaleb Catterson, Katelyn Laws, Macey Miser, Mark McAllister, Riley Botkin, Tanner Robert, Taylor Thomas and Zac Proehl.

2019 Lyon County Fair Pre-entries

Fair pre-entries will again be available through an online fair system purchased by the Lyon County Fair Board. 4-H families will direct enter the projects they wish to exhibit at the 2019 fair. Please prepare and make pre-entries online by the July 1 deadline. More information is posted at www.lyon.ksu.edu under the 4-H Youth Development tab.

All pre-entries will be made via the online fair management program, including rodeo, rabbit and poultry. With family tagging, be sure that prior to sitting down to make livestock entries, please have your tag numbers ready and matched with your 4-Hers. You'll want to enter all livestock with the correct 4-H tag to be shown by the respective 4-Her. If necessary, animals may be substituted for a 4-Her so long as a properly tagged animal is substituted for the 4-Her, but 4-Hers should have a good idea of which animal(s) they intend to show in a specific class at the fair by the July 1 pre-entry deadline.

You will have assigned livestock housing by club and family again this year. Livestock insurance will still need to be paid for at the Extension Office by July 1.

Shooting Sports pre-entry: If you participated in the winter ribbon shoot or know you will qualify and participate in the summer shooting sports ribbon shoot, please pre-enter in the correct categories for shooting sports. Watch the 4-H tab on the Extension website for pre-entry assistance and for more information.

Please be sure to check out the livestock weigh times on the fair calendar included in this newsletter and the fair book. Please read schedules and the fair book closely.

Keep in mind that there is no way to be inclusive when trying to highlight fair changes. Read over your classes carefully when you receive your fair book. The fair book is available online at www.lyon.ksu.edu.

Gary Fuller Spring Classic a Success

Congratulations to all the Lyon County 4-H exhibitors who participated in the 2019 Gary Fuller Spring Classic. We had about 500 total sheep, goats, cattle and pigs during the weekend event with great representation from Lyon County 4-Hers. Please be sure to thank our local sponsors who helped make this show a success.

Allen Meat Processing
Michelle E. Malone, DDS, PA
Bluestem Farm & Ranch Supply
The Copper Top
Brian & Jill Creager
Davis Farms Trucking, Brad & Debbie Davis
East Emporia Vet Clinic
F&F Feeds
Frontier Farm Credit
Fuller Hay LLC
Gary Fuller Memorial
Dan & Susan Johnson
Jerry Karr
Malone Hereford Farm
Miracle Café
MRSK Buildings
Larry & Sylvia Miller
Murphy Agri LLC
Navrat's Office Products
Olpe Locker LLC
PrairieLand Partners John Deere
Producers Coop of Girard
Silver Smith Genetics
Wingert Farms LLC, Naomi Wingert
Roland Webb

2019 Fair Notes

The official fair dates for the carnival are Aug. 7-17, but we know there are many 4-H activities beyond the carnival's arrival and departure. The Friends of 4-H Picnic will kick off 4-H related activities on July 25. You may find a fair schedule online at www.lyon.ksu.edu. The Anderson Building will be closed for the final time on Saturday, Aug. 10 at 9:00 p.m. The projects will be released from 1:00 p.m. to 2:30 p.m. on Sunday, Aug. 11.

There will be a meat goat and sheep health inspection at the 2019 Lyon County Fair. The inspection will take place prior to your animals going across the scale, so it's important to check them prior to bringing them to the fairgrounds. All livestock, including sheep and meat goats, are expected to be in good health and disease free to enter upon the fairgrounds. If in doubt, check with your veterinarian prior to bringing your animal(s) to the fairgrounds. All animals are subject to examination by officials of the Lyon County Fair. Any animal appearing diseased, emaciated or extremely unthrifty will not be accepted.

Clean Up Your Livestock Stalls at the Fair

No matter what specie(s) a 4-Her exhibits at the Lyon County Fair, that 4-Her and his or her family is responsible for cleaning up the stall(s) after the premium sale and release time. If you do not clean up after your livestock, the fair board may withhold your premium money for your livestock.

Lyon County Open Youth Rodeo/Horse Show

The 2019 Lyon County Open Youth Rodeo will be held on Saturday, July 13 at 5:30 p.m. Entry forms are available at the Extension Office. The Lyon County Open Horse Show will be held on Sunday, July 14 with registration beginning at 9:00 a.m. Information is available at the Extension Office.

Southeast Area Contests

Lyon County 4-H was well represented at the Southeast Area Horticulture, Photography, Crops and Family and Consumer



Science contests hosted in Emporia on June 11. We had a handful of individuals place in the Top 10 in each

contest, as well as a team placing in the intermediate family and consumer science contest with team members

from Cloverleaf and Busy Beaver's 4-H clubs. John Pringle, Riverside 4-H Club, took home first place in the senior photography contest. Congrats to all 4-Hers who came out to experience the great competitions offered with the work of volunteers and Extension professionals in our area. Each of our Lyon County participants were first time competitors in the Southeast Area Contest. It's a great event to experience a variety of competitions surrounding several of our 4-H project areas.



Friends of 4-H Picnic

PICNIC

The Friends of 4-H Picnic will be held at 6:30 p.m. on Thursday, July 25 in the Anderson Building. 4-H families are asked to bring: 1 vegetable/casserole dish, 1 salad, AND 1 dessert. Meat will be provided. The 4-H Council will provide tea, plates, and silverware. Please bring your food to the Anderson Building by 6:00 p.m. so serving can begin at 6:30 p.m.

Club assignments are as follows:

Picnic Set-up (Wednesday, July 24 at 6:00 p.m.): **Logan Avenue, Model Boosters, Rinker**

Decorations: **Reading**

Arrange/Serve Food: **Riverside**

Drinks: **Sunflower, Busy Beavers**

Trash: **Happy Harvesters**

Table/Chair Clean-up: **Chamness, Cloverleaf**

Fair Work Assignments

The club assignments for pre- and post-fair clean-up are as follows:

-Wednesday, July 24 – 6 p.m. Diner Clean up – **Happy Harvesters**

-Saturday, July 27 – 7:30 a.m. – Set up Anderson Building for judging – **Reading, Rinker**

-Monday, July 29 – 6 p.m. – Set up Anderson Building – **Riverside and all 4-H Superintendents**

-Monday, July 29 - 6 p.m. – Pick up trash on grounds – **Busy Beavers, Chamness, Cloverleaf, Model Boosters**

-Sunday, August 11 – 12:30 p.m. **all 4-H superintendents**: Release exhibits and cleanup Anderson Building from 1:00-2:30 p.m.

-Monday, August 12 – 12:00 p.m. (noon) - Show arena pre-sale cleanup – **Sunflower** - Immediately following the sale – show arena cleanup – **Logan Avenue**

-Monday, August 19 - fair grounds clean up – **all clubs** – pizza and pop provided by the Fair Board.

2019 Kansas State Fair

The 2019 Kansas State Fair is September 6-15. In order to exhibit at the Kansas State Fair, 4-Hers must have turned 9 years old by Jan. 1, 2019. Livestock entries must have met nomination and entry deadlines. For all other projects, only purple ribbon winners are eligible to compete at the Kansas State Fair, with the exception of Visual Arts. Be sure to read the state fair guidelines as you may not be able to enter all items that received purple ribbons as some State Fair classes limit the number of items from each 4-Her. In the Visual Arts Division, the judges will select six exhibits for the State Fair. Even though Visual Arts exhibits are selected, they must still pre-enter. Visual Arts are for display and ribbon only, no premium money is awarded.

All State Fair pre-entries are due by 2:30 p.m. on Sunday, Aug. 11. The pre-entry forms and a copy of the State Fair book will be available at the Fair Office during the fair. Pre-entries will not be accepted at the Extension Office.

Fair Ticket Sales

Fair tickets will be handed out on July 1. Club Leaders are encouraged to contact the Extension Office to set up a time to meet with a fair board representative to pick up club tickets on July 1. Money and excess tickets will be due back in the Fair Office, Tuesday, Aug. 6 (schedule will be determined at the time of ticket distribution). Please ask your club leader when ticket sales will be due to your club ticket sales coordinator. They will likely need unsold tickets and ticket sales prior to Aug. 6.

4-H Council

The July Council meeting will be held at the Extension Office on Monday, July 1, at 7:00 p.m.

48 Hours of 4-H in 2019

48 Hours of 4-H is a state-wide campaign in 2019 to see how significantly 4-H youth give back to their communities. The weekend after National 4-H Week, is the perfect opportunity to setup a service project. Invite your friends, clubs, adult volunteers and 4-H Alums too!

When: October 12-13, 2019

Who: 4-H Members, 4-H Clubs, Friends, Adult

Volunteers, Parents, 4-H Alumni

A state planning guide, the link for T-shirt orders and registering projects will be available soon. Clubs are encouraged to make plans to participate and share your project at: www.Kansas4H.org/484H.



Vet Med Summer Camp in Manhattan

Vet Med ROCKS Summer Camp, set for Aug. 2-6, is a series of day camps providing youth, ages fourth grade to pre-vet students, a hands-on and behind the scenes look at the K-State College of Veterinary Medicine. Vet Med ROCKS camp will consist of a full day of activities at Kansas State University College of Veterinary Medicine! Specialized activities in Zoo Animal, Lab Animal, Small Animal, Equine and Large Animal are planned! Interact with faculty in their areas of expertise for a focused day of education!

Activities to choose from:

Inside look at the work of veterinarians at the Sunset Zoo. In depth study of an equine patient: What causes colic? Can you identify lameness in a horse and find the cause? Understand the unique anatomy of our equine patients. What does a Lab Animal Veterinarian do every day? Get a specialist's perspective at this unique field of study and practice in veterinary medicine.

Encounter a patient who needs your help during your visit to the Small Animal Hospital at the Veterinary Health Center.

Help "Bessy" deliver a calf and visit our campus farms!

- Register by July 12, 2019 to be guaranteed a T-shirt. August 2-4, 2019 High school and College Camp (entering 9th -12th and students currently enrolled in undergraduate studies)
- August 5, 2019 Grade School Camp (entering 4th-6th)
- August 6, 2019 Middle School Camp (entering 7th-8th)

For more information and to register online: www.vet.k-state.edu/asp/rocks/

2019 LYON COUNTY FAIR 4-H SCHEDULE

Thursday, July 25

6:30 p.m. Friends of 4-H Picnic – Anderson Building

Friday, July 26

5:00 p.m. Dog Show – Anderson Building
Hand Pet and Cat Show – Anderson Building

Saturday, July 27

8:00 a.m. Clothing Construction & Construction Modeling begins – Anderson Building
9:00 a.m. Boys & Girls Buymanship conference judging begins – Anderson Building
1:30 p.m. Photography, Home Environment, Rocketry, Forestry, Entomology, Reading, Geology, Leadership, Other Projects, Electrical & Fiber Arts Judging – Anderson Building
6:00 p.m. Public Fashion Revue – Anderson Building

Sunday, July 28

8:00 a.m. Horse Show – Arena

Saturday, August 3

8:30-9:30 a.m. Exhibit entry time for projects not conferenced judged or previously judged
9:00 a.m. Visual Arts, Foods, Crops, Horticulture, Floriculture, Metals, Woodworking, Reading & Banners – Anderson Building

Wednesday, August 7

6:00 p.m. 4-H Rodeo – Grandstands

Thursday, August 8

(All animal entries in place by 5:00 p.m.)

3:00-5:00 p.m. Swine weigh-in
4:00 – 5:30 p.m. Sheep Weigh-in/ Meat Goat Weigh-in
6:00 p.m. Beef Weigh-in
7:00 p.m. Bucket calf check-in and weigh-in
7:30 p.m. Shooting Sports Awards Presentation – Show Barn Arena

Friday, August 9

8:00 a.m. Rabbit Show
8:30 a.m. Beef Show
5:30 p.m. Bucket Calf Show
~6:30 p.m. Dairy Show (following completion of Bucket Calf Show)

Saturday, August 10

8:00 a.m. Meat Goat Show
6:00 p.m. Sheep Show

Sunday, August 11

8:00 a.m. Swine Show
9:00 a.m. Poultry Show
5:00 p.m. Kid's Pedal Tractor Pull
7:00 p.m. Team 4-H Livestock Presentation
7:15 p.m. Pee-Wee Showmanship
1:00-2:30 p.m. All exhibits released from the Anderson Building
2:30 p.m. State Fair entries due – Fair Office

Monday, August 12

8:00 a.m. Round Robin
Following Round Robin - Animal exhibits released except those in the Livestock Sale
6:00 p.m. Premium Sale – Lyon County Fair Grounds – Show Arena



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Agriculture and Natural Resources

July – August 2019

What to do with Unplanted Acres

The continued wet conditions this spring have brought with them major concerns for crop producers in the area. Although there are a few upland fields that look pretty good, most fields in the area have many “holes” or drowned-out spots that may be totally dead, or at a minimum stunted and yellow. And there are certainly many fields that have either been planted and were under water or have been too wet to plant at all.

What do you do with these fields, or areas within them? I would like to throw out some considerations to assure that you are not going to create more problems for yourself in the years to come. Field management and weed control should be high concerns. I suggest three primary options to consider.

The most preferred in my opinion would be to plant something that could be of value later in the season. I know it wouldn't be your first choice as a cash crop, but that option is already gone. That would then lead to either a cover crop that may or may not have forage value, or an alternative forage that could be harvested with the forage sold or fed. Check with FSA and your crop insurance agent to make sure this would not affect your insurance or program status. This option has the potential to have something green and growing above ground and live roots in the ground that will provide pore space and organic material for the future. And it will certainly help minimize future weed issues. If this has appeal, I would also encourage consideration of any herbicides applied ahead of the planned cash crop.

A second alternative would be more conventional chemical weed control of the field. This brings along rotational considerations for any following crops, as well as any other thoughts regarding appropriate herbicide selection to control the weeds in the field. One common herbicide that worked well for some time, glyphosate, has more and more weeds showing resistance. Other growth regulator type herbicides are prone to drift, volatilization, and other means of off-site movement. When using any herbicide, read and follow label directions for mixing and application.

Mowing is an option that could limit plant growth but may not eliminate seed production. And finally, I would suggest tillage as an option for weed control. This will work, but it may be the costliest. In the end, we all need to evaluate the options individually.

Producers are Encouraged to Report Prevented Planting and Failed Acres

USDA Farm Service Agency (FSA) reminds producers to report prevented planted and failed acres in order to establish and retain FSA program eligibility.

Producers should report crop acreage they intended to plant, but due to natural disaster, were prevented from planting. Prevented planting acreage must be reported on form *CCC-576, Notice of Loss*, no later than 15 calendar days after the final planting date as established by FSA and Risk Management Agency (RMA). For Lyon and Chase Counties the final plant date for corn was May 25th and the final plant date for soybeans is June 25th. Contact your local FSA office for a list of final planting dates by crop.

Producers unable to report prevented planting acreage within the 15 calendar days of the final planting date can submit a late-filed report. A measurement service fee will be charged. Late-filed reports will only be accepted by FSA if a farm visit can visually confirm the existence of an eligible disaster condition.

For answers to questions please do not hesitate to contact the Lyon/Chase County FSA office at 620-343-2812 or inquire in person at 3020 W. 18th, Suite A, Emporia, Kansas 66801.

Eastern Tallgrass Range School

The 2019 Kansas Adult Range Schools will be held August 20-22 at Camp Wood YMCA near Elmdale. Plan to attend this year to learn more about range land management in a friendly, educational and informative setting with other ranchers, land managers, range management students and natural resource professionals. You can register at KGLC.org for the schools which cost \$350 per student which covers room, board and tuition for the 2½ day schools. Scholarships of \$175 are available for most ranchers and eligible college students while scholarships of \$125 are available for most natural resource agency personnel. The West, or Mid and Short Grass School, is scheduled for August 6-8 near Tipton.

Besides learning plant identification, how to figure stocking rates, how to monitor vegetation response and the rest of the basics needed to manage your rangelands for both livestock and wildlife, there will be ranchers and

natural resource professionals talking with you about planning for and responding to whatever nature or market forces bring to your ranching enterprise to keep rangeland health high and livestock productive. Learn more at KGLC.org, call 785-452-0780, or email barth.crouch@gmail.com or register before July 24th! Make this the year you attend the Kansas Range School!

Pasture, Range and Forage Insurance

If you haven't participated in the past few years, I would encourage you as a livestock producer to talk with your crop insurance agent or lender about PRF to insure your forage production. Deadline isn't until November, but now is the time to ask questions!

Non-Spring Rangeland Prescribed Fire

Many questions continue to come in regarding non-spring prescribed burning of native rangeland in the area. This does look like it has a great deal of potential for not only sericea lespedeza control, but also many encroaching woody plants.

It appears that consecutive years of late summer fire are quite effective at reducing seed produced and weakening the established sericea plants, with minimal effect on the plant species composition in the pasture. Data on livestock performance is still being evaluated.

Remember that regardless of the season, if you are planning a controlled burn in Lyon County you still need to abide by the burn policy and notification requirement.

Cover Crops on Prevented Plant Acres

There are many opinions on cover crops. I would like to share some of the benefits from utilizing covers, especially regarding prevented plant acres.

Covers can improve soil structure and biological activity in topsoil. They will increase permeability and decrease compaction. And, depending on cover crop used, they can build soil nitrogen either by fixing nitrogen from the atmosphere (legumes) or scavenging nitrogen from the soil and trapping it in the plant biomass (grasses and brassicas). Many of these benefits are highly connected and work in unison to benefit the environment.

Crop selection is important when starting. I would encourage you to develop your goals for using covers. From there, the selection process starts. Grasses will generally get you the most biomass quickest, and warm

season grasses are at the top of the list when it comes to generating biomass. Legumes will fix nitrogen (pay attention to what time of year you are planting and planning for nitrogen fixation), and brassicas (turnip, radish, and canola) have large taproots that will improve permeability as well as accumulating nutrients. Often, depending on your goals, it is beneficial to have multiple species planted that will not only benefit each other, but also you and the soil. But as you mix, pay attention to how you seed the crops. As with conventional crops, how you plant the seed is critical to success.

A good selection reference tool that will provide good guidance can be found at www.mccc.msu.edu. The Midwest Cover Crops Field Guide is also available at www.edustore.purdue.edu.

Covers can be a very useful tool in any cropping system, but especially as we work through a difficult spring and early summer maybe they can provide a chance to help improve soil structure, increase infiltration and increase the nutrients available to your next cash crop!

Sericea Lespedeza Control

PLEASE – Know This Plant!!!

With good growing conditions, summer can be a good time to reduce undesirable plant species in your pastures. Please work to learn the plants in the landscape – good and bad – and not just the ones you like! It is very good to know beneficial plants from harmful ones!



Once the plants are ID'd, determine the best means to manage them – increase, maintain, or remove – in the most effective and efficient manner. Know the purpose of your pasture (hay, graze, recreation) and particularly any label restrictions if you plan to use herbicides.

Also, become familiar with the products you may use. Just because a product has a plant on the label doesn't mean it will control it at any growth stage. Timing is critical in any herbicide control plan. And occasionally a plant may be defoliated but not killed and will re-leaf and flourish later in the season.

And remember that research shows that Remedy or PastureGard is most effective against sericea lespedeza while the plant is vegetative, while Escort is most effective once the plant starts flowering (usually in late August or September).

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Horticulture

K-STATE
Research and Extension

Master Gardener
Lyon County

July – August 2019

Master Gardener Applications Available

Do you enjoy gardening? Do you want to learn more about plants and how they grow? If you answered yes to these two questions, then being a Master Gardener is for you. The Lyon County Extension Office is accepting applications for individuals interested in becoming a Lyon County Extension Master Gardener from now to August 9th. Once the applications are received a letter with information about the orientation session and interview will be sent out to the applicant. After the orientation session and interview, individuals will then be selected to go through the training process to become a Lyon County Master Gardener.

After being accepted into the Master Gardener program, all new trainees will attend roughly 40 hours of training. The training will take place every Thursday for 12 weeks starting in September. Classes will be held mainly in Newton, but will rotate between Emporia, Hutchinson, El Dorado, Haysville, and Hesston. There will be a Lyon County van traveling there and back on training days.

After the Master Gardener Trainee has completed the 40 hours of training, they are given one year to complete 40 hours of volunteer service and 5 hours of continuing education. After the first year, the Master Gardener will then have to complete 15 hours of volunteer service plus 5 hours of continuing education to remain an active member.

Lyon County Master Gardeners complete their volunteer hours by working in different demonstration beds throughout Emporia, helping at Sick Plant Clinics, 4-H/Youth events, helping in area schools promoting horticultural practices, answering questions on the gardening hotline, educating school age children at Zoo Safari and the Emporia Garden tour.

If you are interested in becoming a Lyon County Master Gardener, stop by the Extension Office to pick up an application or visit our website www.lyon.ksu.edu and click on the Master Gardener tab located on the left-hand side of the page. Applications are due August 9, 2019 at 5:00 p.m. at the Lyon County Extension Office.

Weird Squash, Cucumbers or Melons

Occasionally we will receive a call from someone who has a squash (or cucumber or melon) that just does not look like what was supposedly planted. They often wish to know if that fruit had cross-pollinated with another vegetable close by. In these cases, the gardener is assuming that cross-pollination will affect the fruit. This is not the case. The characteristics of the fruit is determined by the mother plant and is not affected by cross-pollination. However, there will be a problem if seed is saved for the next year from a flower that was cross-pollinated. All bets are off on what you will get if that happens.

So, how do we end up with this weird fruit? Though it could be that the gardener had forgotten exactly what he or she planted, more likely it is that the seed that was planted had been cross-pollinated before packaging. Another possibility is that it came from seed that was from fruit that had rotted in the garden the previous year. Regardless, do not worry about planting different cultivars of squash or cucumbers or melons close to one another. Though cross-pollination may occur in some cases, the fruit will not be affected.

Soil Testing

Before amending your soils or adding fertilizer before planting it is a good idea to have a soil test done. A soil test helps us understand what the pH, phosphorus, and potassium levels already are. If these levels are within recommended ranges for your crops, then we only recommend fertilizers with nitrogen. We will also inform you to be cautious on the amount of organic matter, peat moss and some other amendment you want to add to the soil as they can affect the pH level. The only element we normally do not test for is nitrogen. Nitrogen is easily leached out of the soil during watering or rain events. When giving soil recommendations we generally do recommend a nitrogen fertilizer.

Here are a few tips on collecting soil samples. If you follow these tips, then the results will be more representative of the overall area. When taking the samples, make sure that you are collecting soil to a depth

of 8 to 12 inches. This is to give a more representative sample in the roots zone. Take at least 10 samples from the area. Combine these samples in a clean bucket and mix them together. After mixing the samples together, select about a pint of soil and place it in a zip top container and bring it into the Extension Office to be sent off for testing. If you are doing more than one area, make sure to label your samples. When you bring the samples into the office, you fill out a form that gives some background information about the garden plot, landscape bed or lawn to help with recommendations when the results come back. Once the office obtains the results, you will then receive the results with recommendations for your area.

Hornworms on Tomatoes

Hornworms are the largest larval insect commonly seen in the garden. Though usually seen on tomato, they can also attack eggplant, pepper, and potato.

The larval stage of this insect is a 3 ½- to 4-inch long pale green caterpillar with five pair of prolegs and a horn on the last segment. The two most common hornworms are the tobacco hornworm (seven diagonal white stripes and, most commonly, a red horn) and the tomato hornworm (v-shaped markings with a horn that is often blue or black).

The adult of the tobacco hornworm is the Carolina sphinx moth. The five-spotted hawk moth is the adult of the tomato hornworm. Both moths are stout-bodied, grayish-colored insects with a wing spread of 4 to 5 inches.

The larva is the damaging stage and feeds on the leaves and stems of the tomato plant, leaving behind dark green or black droppings. Though initially quite small with a body about the same size as its horn, these insects pass through four or five larval stages to reach full size in about a month. The coloration of this larva causes it to blend in with its surroundings and is often difficult to see despite its large size. It eventually will burrow into the soil to pupate. There are two generations a year.

This insect is parasitized by a number of insects. One of the most common is a small braconid wasp. Larva that hatch from wasp eggs laid on the hornworm feed on the inside of the hornworm until the wasp is ready to pupate. The cocoons appear as white projections protruding from the hornworm's body. If such projections are seen, leave the infected hornworms in the garden. The wasps will kill the hornworms when they emerge from the cocoons and will seek out other hornworms to parasitize.

Handpicking is an effective control in small gardens. Bt (Dipel, Thuricide), spinosad (Conserve; Borer, Bagworm, Leafminer & Tent Caterpillar Spray; Colorado Potato Beetle Beater Conc; Captain Jack's Dead Bug Brew,

Monterey Garden Insect Spray), cyfluthrin (Bayer Vegetable & Garden Insect Spray) and other insecticides may also be used to control hornworms.

Look for Bagworms in June

Most calls on how to control bagworms come in late July to early August when damage appears. Bagworms are difficult to control when they are that large. They are much easier to kill while small. Bagworms overwinter as eggs inside the dead female's bag. Young larvae normally hatch and emerge during mid to late May in Kansas. Now would be a good time to use control measures if you have not already sprayed. However, make sure the bagworms are present by looking for a miniature version of the mature bagworm. Also, check to be sure the bagworms are alive before spraying. Predators and parasites can sometimes naturally control this pest.

Insecticides commonly used for controlling bagworms include acephate (Orthene), permethrin (numerous trade names), cyfluthrin (Bayer Vegetable and Garden Insect spray), bifenthrin (Bug Blaster II, Bug-B-Gon Max Lawn and Garden Insect Killer), lambda-cyhalothrin (Spectracide Triazicide, Bonide Caterpillar Killer) and spinosad (Conserve; Borer, Bagworm, Leafminer and Tent Caterpillar Spray; and Captain Jack's Dead Bug Brew). Spinosad is an organic control that is very effective on this pest. Thorough spray coverage of foliage is essential for good control with any of these products.

Call "Kansas One Call" Before Digging

Most people don't know what is buried under their property. Always call Kansas One Call before planting or setting fence. You may reach them at 811. Actually, people should never dig deep enough by hand to hit a gas line while planting a tree unless a large tree spade is used. When hand digging, make the hole just deep enough so that the tree sits slightly above nursery level. To determine the depth of the hole, measure the distance from the root flare (point where trunk and roots meet) to the bottom of the root ball. If the flare isn't visible (very common), remove enough soil or media so that it is.

The width of the planting hole is also very important. It should be two to three times the width of the root ball. Loosening the soil outside the hole so it is five times the diameter of the root ball will allow the tree to spread its roots faster.



Rhonda Gordon
County Extension Agent
rgordon@ksu.edu

Family & Consumer Sciences

President's Council

In Rhonda's absence we are looking for a volunteer to coordinate the President's Council meetings. Please contact the Extension Office if you are interested. Potential dates are:

- October 4, 2019**
- November 1, 2019**
- December 6, 2019**

This isn't good-bye

Until we meet again.... I am retiring from Extension the end of August. It has been an honor and pleasure serving as your County Extension Agent for Family and Consumer Sciences the last 11 years and a SNAP Nutrition Educator for two years before becoming the agent in the county. The last 13 and half years have gone so fast in service to our county.

I will miss all of you and the work we have done together on different projects in our county. Thank you for all the help and support you have shown me over the years. I know that you all are the reason for the success of the Extension programs. We couldn't do the work we do without all of you. You have been my volunteers, my audience and my focus groups. You have allowed me to try new classes, recipes, events and always given me feedback. Please stay in touch or stop and say hi. I will be in and out of the office until August 30th. Thank you for everything. I loved being your county agent.



2019 Lyon County Fair Spotlight Event

Bread Sculpture Contest

The spotlight event this year at the Lyon County Fair will be held on Sunday August 4th. Entries will be taken in from 12:30 to 1:30 p.m. at the Anderson Building on the Lyon County Fairgrounds. This event will be judged during the regular open class judging time. Judging will not be open to the public this year.

The rules were published in last April-May Newsletter or may be picked up in at the Extension Office. The State

Fair rules will also be our rules so that you may take your entry on to the State Fair if you would like. Here is how the sculptures will be judged in Lyon County and also at the State Fair.

Learn more at www.rrc.k-state.edu/doc/judging/breadsculpture.pdf.

There are three classes: Youth, Adult and Teams of 2 -3

<u>Scorecard for Bread Sculpture</u>	
Creativity/Originality/Imagination/Realistic Movement	30
Execution/ Crisp Details	25
Design/Visual impact	25
Color Palette/Color Design	10
Instructions/Illustrations/ Photos (so others can make sculpture)	10
TOTAL	100

What is Alpha-gal Allergy?

The next time you work outside or do outdoor recreation, be aware of ticks and protect yourself from tick bites. The Lone Star tick has been linked to causing allergic reactions after eating red meat.

The Lone Star tick is a vector that can spread disease. Mosquitos and fleas are other insects that spread disease. The Alpha-gal molecule is carried in the saliva of Lone Star ticks. People bit by this tick can become sensitive and produce the immunoglobulin E (IgE) antibody. Unlike typical food allergies, which is a reaction to protein, this is a reaction to the carbohydrate galactose- α -1,3-galactose. This carbohydrate is found in most mammals, such as red meat animals. It can also be in products made from mammals. It is not found in poultry or fish.

Symptoms include rash, hives, difficulty breathing, drop in blood pressure, dizziness, fainting, nausea, and severe stomach pain. These symptoms can occur in 3-6 hours after eating red meat. The Alpha-gal allergy can be severe, and potentially life-threatening.

See a healthcare provider immediately for care. Learn more at www.cdc.gov/ticks/alpha-gal/index.html and www.aaaai.org/conditions-and-treatments/library/allergy-library/alpha-gal

Food Judging Reminders

County fair season is almost here! For those who judge or those who participate in foods and food preservation, take time to refresh your knowledge now.

Many resources and videos are available at www.rrc.k-state.edu/judging/index.html. **One new addition for food judging is the issue of raw flour.** This should not be an ingredient in no-bake products such as cookies. **This includes any type of raw flour, including gluten free flour.** This does not include oatmeal, cereal or chow mien noodles commonly used in no-bake cookies.



ALDI Flour Recall Linked to Eating Raw Dough

Photo courtesy CDC

ALDI grocery stores recalled all-purpose flour recently due to a multistate outbreak of *E. coli* O26 infections. As of May 24, 2019, 17 people have been infected across eight states. No deaths have been reported.

Investigation results have shown that of those interviewed, they reported eating, licking, or tasting raw dough or batter. DNA fingerprinting identified the flour as the source of the infection.

Symptoms of *E. coli* infection can appear in one to three days. But the time it takes to confirm that a person is a part of an outbreak can take two to three weeks.

Learn more at www.cdc.gov/ecoli/2019/flour-05-19/index.html.



What is Hepatitis A?

A current recall of frozen blackberries is ongoing for possible Hepatitis A contamination.

Hepatitis A is a contagious liver disease that results from exposure to the Hepatitis A virus, including from food. It can range from a mild illness lasting a few weeks to a serious illness lasting several months. Illness generally occurs within 15 to 50 days of exposure and includes fatigue, abdominal pain, jaundice, abnormal liver tests, dark urine and pale stool. Hepatitis A vaccination can prevent illness if given within two weeks of exposure to a contaminated food. In rare cases, particularly consumers who have a pre-existing severe illness or are immune compromised, Hepatitis A infection can progress to liver failure. Persons who may have consumed affected product should consult with their health care professional or local health department to determine if a vaccination is appropriate, and consumers with symptoms of Hepatitis A should contact their health care professional. Learn more at <https://bit.ly/2F1J9bB>.

What is Aquafaba?



There's a hidden secret in that can of garbanzo beans! It's aquafaba! The next time you open a can of garbanzo beans (a.k.a chickpeas) and drain the liquid, don't pour that liquid down the drain. That liquid can mimic an egg white foam and be a good substitute for egg allergies or in vegan recipes.

The word aquafaba is Latin for water, *aqua*, and bean, *faba*. It is very new in the culinary world. The starch and protein makes it functional as a binding agent, thickener, and emulsifier. When whipped, and stabilized with cream of tartar, it looks like egg white foam. Some sources say the ability for aquafaba to create a foam can vary between different brands of garbanzo beans.

To use aquafaba, try these substitutions:

- 3 tablespoons aquafaba = 1 whole egg

- 2 tablespoons aquafaba = 1 egg white

Learn more at <https://bit.ly/2I9iVWw> and

www.americastestkitchen.com/guides/vegan/what-is-aquafaba

Photo courtesy Iowa State University Extension



Mixing Matters

How ingredients are mixed together can make or break a successful outcome when baking. Directions are given to combine certain ingredients and should be followed. For example, in making a layer cake, there are two methods, the creaming and

re-verse-creaming techniques.

The creaming method starts by beating the sugar and butter together until light and fluffy. The sugar crystals beat little air pockets into the fat. Then the wet and dry ingredients are added in a dry-wet-dry-wet-dry pattern to reduce gluten development and make a tender cake. During baking the air pockets made during creaming, leaven or lift the cake to give a light airy structure. The top typically has a slight dome.

The reverse-creaming method starts by mixing butter with all of the dry ingredients. The butter fat coats the flour particles making the flour waterproof. The liquid is added but only some flour proteins will get hydrated. This limits gluten development and increases tenderness. Without incorporating air, the cake will be a bit shorter, have a flatter top and will be quite tender. This is better for fancy, multiple layer cakes. Source: *Cook's Illustrated*, October 2018

Lyon County

2632 West Highway 50
Emporia, KS 66801

Return Service Requested

July

- 01 4-H Fair Pre-Entries due
- 01 4-H Fair livestock insurance due to Extension Office
- 01 Master Gardener Meeting, 5:15 p.m., AB
- 01 Dog Project Meeting, 6 p.m., AB
- 01 Ambassadors Meeting, 6 p.m., EMR
- 01 4-H Council, 7 p.m., EMR
- 04 Independence Day – Extension Office Closed
- 13 Lyon County Open Youth Rodeo, 5:30 p.m., Fairgrounds
- 14 Lyon County Open Horse Show, 9 a.m., Fairgrounds
- 15 Fashion Revue scripts due to Extension Office
- 21 Poultry Club Meeting, 1 p.m., EMR
- 21 Hop to it Rabbit Club Meeting, 2 p.m., EMR
- 25 Friends of 4-H Picnic, 6:30 p.m., AB
- 29 Fairgrounds cleanup, 6 p.m.

August

- 11 State Fair entries due to Fair Office by 2:30 p.m.
- 15 KJLS Entries due
- 19 Fairgrounds cleanup, 6 p.m.
- 20 Rhonda's Farewell Party, 4 – 6 p.m., EMR
- 28 Pick up 4-H livestock market checks, 5–8 p.m., Fair Office
- 31 Pick up 4-H livestock market checks, 9 a.m.-noon, Fair Office

See 4-H section for Fair schedule and events

AB = Anderson Building
BCB = Bowyer Community Building
EG = Extension Garage
EMR = Extension Meeting Room