

AGRICULTURE AND NATURAL RESOURCES  
HOME AND FAMILY

WINTER, 2018

Contact Information

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8:00 A.M.-5:00 P.M.

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**4-H Soup Supper**  
**Sunday, January 20th**  
**Serving 5-7 PM Ext. Bldg**  
**Chili - Chicken Noodle - Potato**  
**Pies - Relish - Beverage**

*“Free will donations go toward leadership events.”*



**Even without eggs, eating uncooked dough can be a raw deal!**

You have probably heard it’s a bad idea to eat uncooked cookie dough because it contains raw eggs. But raw flour can also make you sick, says Londa Nwadike , extension state food safety specialist for Kansas State University and the University of Missouri.

“Bacteria from animal waste and other sources can contaminate grain in the fields or throughout the grain transportation and flour production system,” Nwadike says. According to the US Food and Drug Administration, flour from milled grain is typically not treated to kill bacteria. “That means it’s not safe to eat until properly cooked,” she added. You might have licked cake batter or cookie dough from spoons lots of times with no ill effects. But some haven’t been so lucky, Nwadike says.

In 2016, more than 60 people grew sick from E. coli bacteria linked to contaminated raw flour, according to the US Centers for Disease Control and Prevention. More than 10 million pounds of flour and flour-containing products were recalled, including bread, pastry and pancake mixes.

What about cookie dough ice cream? Nwadike says commercially purchased cookie dough ice cream should be safe because it contains heat-treated flour and pasteurized eggs. But that might not be true of all store-bought cookie dough for baking. A 2009 outbreak traced back to prepackaged raw cookie dough sickened 72 people; many of them were hospitalized. Continued on page 2

“Bacteria have changed over the years, so they may be more likely to cause ill effects now than in the past,” Nwadike says.

The FDA offers safety tips for preparing cookies, pies, cakes and other foods containing raw flour.

- Don't eat uncooked dough, batter or other foods containing raw flour.
- Be sure children don't eat or taste dough used in crafts.
- Make sure foods containing flour are cooked to the proper temperature. Follow recipes or package directions.
- As with raw meat, keep raw flour or eggs separate from ready to eat foods.
- Clean bowls, utensils, countertops and other surfaces thoroughly after use. Wash hands often.

#### **Suggested final internal product temperatures for baked goods.**

- \* Layer cakes: 205-210 degrees F
- \* Pound cake: 210 degrees F
- \* Jellyroll cakes: 190-195 degrees F
- \* Muffins: 210 degrees F
- \* Quick bread: 210 degrees F
- \* Yeast bread: 195-210 degrees F
- \* Bundt cakes: 212 degrees F
- \* Yeast rolls: 190-195 degrees F

Source: K-State Research and Extension

### **SAVE THE DATES**



A series of nine K-State Soybean Production Schools will be offered in late January to provide in-depth training targeted for soybean producers and key-

stakeholders. The schools will be sponsored by the Kansas Soybean Commission.

The schools will cover a number of issues facing soybean growers including: irrigation, weed control, crop production practices, nutrient management and soil fertility, insects and disease management.

The dates are set and specific locations have been chosen with Schools located across the state.

**Wichita, KS** - Jan. 15 (Tuesday) from 8:30-1:00  
(Jackie Fees, [jfees@ksu.edu](mailto:jfees@ksu.edu))

**Parsons, KS**—Jan. 15 (Tuesday) from 3:00-7:00  
(James Coover, [jcoover@ksu.edu](mailto:jcoover@ksu.edu))

**Paola, KS**—Jan. 16 (Wednesday) from 8:30-1:00  
(Katelyn Barthol, [kbarth25@ksu.edu](mailto:kbarth25@ksu.edu))

**Holton, KS**—Jan. 16 (Wednesday) from 3:00-7:00  
(David Hallauer, [dhallaue@ksu.edu](mailto:dhallaue@ksu.edu))

**Hugoton, KS**—Jan. 24 (Thursday) from 8:30-12:30  
(Ronald Honig, [rhonig@ksu.edu](mailto:rhonig@ksu.edu))

**Scott City, KS**—Jan. 24 (Thursday) 3:00-7:00 (John Beckman, [jbeckman@ksu.edu](mailto:jbeckman@ksu.edu))

**Hoxie, KS**—Jan.25 (Friday) from 8:30-12:30 (Keith VanSlike, [kvan@ksu.edu](mailto:kvan@ksu.edu))

**Great Bend, KS**—Jan. 25 (Friday) from 3:00-7:00  
(Alicia Boor, [aboor@ksu.edu](mailto:aboor@ksu.edu) / Stacy Campbell, [scampbel@ksu.edu](mailto:scampbel@ksu.edu))

**Beloit, KS**—Jan. 28 (Monday) from 9:00-1:00 (Sandra Wick, [swick@ksu.edu](mailto:swick@ksu.edu))

Lunch will be provided courtesy of the Kansas Soybean Commission. There is no cost to attend, but participants are asked to **pre-register by Wednesday, Jan 9.** Online registration is available at K-State Soybean Schools (<http://bit.ly/KSUSoybean>) or by emailing /calling the nearest local K-State Research and Extension office for the location participants plans to attend.

**Volunteers are not paid, not because they are worthless; but because they are priceless!**

## **K-State Agronomy eUpdate**

This is an electronic newsletter that comes out each Friday afternoon from the K-State Research & Extension Agronomy Dept. It has timely information for growers, the articles are brief and informative. If you wish to subscribe to this free weekly Agronomy eUpdate. Send your email address to Troy Lynn Eckart as [sprite@ksu.edu](mailto:sprite@ksu.edu).

You can also subscribe to it at:

<https://listserv.ksu.edu/cgi-bin?SUBED1=EUPATE&A=1>

### **AgManager.Info**

The K-State Research & Extension-Ag Economics web site is an awesome resource! This is our go-to website to answer questions about leasing arrangements, cash rents, ag law, cost of production, custom rates, upcoming events, and so much more.

To visit it go to [www.agmanager.info](http://www.agmanager.info)

### **Midwest Cover Crops Decision Tool—data available for Kansas**

A resource available to assist farmers in selecting cover crops to include in field crop rotations. It is easy to use and is a helpful tool, check it out at <http://mccc.msu.edu/covercroptool/covercroptool.php>

### **E-mail is handy**

Periodically on an as needed basis throughout the year I will send out emails to Ag Producers. During the growing season it might be some timely tips or alerts to be checking in your crop(s) for pests (disease & insects) or during the fall and winter of upcoming Extension programs for producers. And K-State Research & Extension has strict rules in place that forbid us to share our mailing or email list to anyone. If you would like to be added to our ag producer email list. Please send your email address to our Office Professional Debby Rains, [drains1@ksu.edu](mailto:drains1@ksu.edu). If you are already on this list but are not getting any emails from me, please check your spam and junk folders first, if you can't find any emails from us feel free to send us your email address again.

## **DICAMBA REGISTRATIONS RENEWED FOR XTENDIMAS, ENGENIA, AND FEXAPAN**

Dallas Peterson, Weed Management Specialist

The long-awaited announcement regarding re-registration of the dicamba products labelled for use on Xtend soybeans and cotton finally happened a couple of weeks ago. The EPA approved the registration for two more years, extending them through December 20, 2020. The new labels will include some additional restrictions from the previous versions to try and further minimize the issues of non-target dicamba injury to susceptible crops and plants. In addition to the previous lable guidelines and restrictions, below is a list of the primary changes to the Xtenimax, Engenia and FeXapan labels.

- \* Only certified applicators may purchase and apply (no application under direct supervision)
- \* Mandatory dicamba or auxin applicator training is required annually for anyone apply the products. Training requirements to be determined by each state.
- \* Only apply between 1 hour after sunrise and 2 hours before sunset.
- \* Postemergence treatments must be applied prior to 45 days after soybean planting or R1 stage and 60 days of cotton planting or mid-bloom stage, whichever comes first.
- \* Recommended to test spray solution for pH and add buffering agent if the pH is less than 5.
- \* Enhanced tank clean-out instructions for the entire spray system.
- \* Records must be generated within 72 hours of application instead of 14 days.
- \* Planting date and documentation of surrounding crops and areas must also be recorded.
- \* In counties where endangered terrestrial dicot species may exist, in addition to the 110 ft.

downwind buffer, a 57 ft. buffer is required around all other perimeters of the field.

- \* Consult <http://epa.gov/endangered-species> for the list of counties requiring additional protection measures along with guidance for specific areas that can be included in the buffer distance calculation for fields in affected counties.

### **EatWheat.org—Telling the Story**

Speaking with one voice is the mission of EatWheat.org to speak for agriculture and farm production practices.

This campaign is driven by Kansas wheat farmers to help consumers learn where their food comes from and how it is grown by caring farmers. After one year of operation, EatWheat.org has reached millions of people. Read farmer stories; learn about wheat and foods made with wheat; get inspired with wheat décor; and enjoy tasty recipes for any occasion. Follow them on a variety of social media platforms.

EatWheat.org is sponsored by Kansas Wheat and the Wheat Foods Council.

### **WILDLAND FIRE PRECAUTIONS...FOR KANSAS FARMERS AND RANCHERS**

In the wake of last years fire in Rice County and the past Starbuck fire in Bourbon Co, these extra precautions should be taken by Kansas farmers and ranchers.

Protect investments by cleaning equipment to avoid starting a fire in the first place. Where possible, store hay bales in defensible space and never under power lines. Prepare not only for inside pets but outside livestock. Have emergency halters stockpiled and clear gates for a speedy evacuation of cattle.

#### **Prepare your Property**

- ◆ Establish and maintain firebreaks around pastures and structures.
- ◆ Reduce vegetation and remove combustible material around all structures.

- ◆ Reinforce fences with metal posts, if applicable
- ◆ Create a safe zone that is clear of all vegetation for equipment.
- ◆ Close all doors and windows, turn on exterior and interior lights in barns and other structures.
- ◆ Shut off gas supply and propane tanks.
- ◆ Contact your wildland firefighting agency or local fire department to coordinate firefighting on your property.
- ◆ Keep copies of gate keys and a written list of combinations in a known location.
- ◆ Keep an emergency supply kit in all ranch and personal vehicles.
- ◆ Prioritize structures, equipment, and other assets by assessing the risk and value of each and the effort it would take to protect them.
- ◆ If you would like to offer your equipment (water tank, tractor, etc.) for firefighting , make arrangements and contracts prior to use for proper tracking and reimbursement.

**REMEMBER THAT NOTHING YOU OWN IS WORTH YOUR FAMILY MEMBERS' LIVES.**

#### **Prepare your Animals**

- ◆ Create a livestock evacuation plan.
- ◆ Ensure proper registration and branding of livestock.
- ◆ Establish a contingency plan for feeding livestock if grazing is destroyed by fire.

#### **Evacuating your Animals**

- ◆ In the event of a fire, do not hesitate to hook up your stock trailer and load the animals you will evacuate.
- ◆ Unlock and open gates so livestock can escape flames and firefighters can gain access
- ◆ Close all barn doors so horses and livestock will not go into a burning building.



## Drones help researchers stay on top of wheat improvement.

Dr. Jesse Poland, associate professor of plant pathology at Kansas State University, is learning critical information that will lead to future generations of wheat in Kansas and beyond.

“Field seasons in India, Pakistan and Bangladesh are offset from the field seasons in Kansas,” said Poland, who is director of the university’s Feed the Future Innovation Lab for Applied Wheat Genomics. “We can actually be doing work in India during the winter here, learning things and improving the systems, then bring that back and add another season of innovation and improvement here in Kansas. It greatly increases the speed of innovation and testing in our field research.”

For the past three years, Poland and a team of researchers have worked in five countries to test and develop new agricultural technologies which improve crop growth. Unmanned aerial vehicles (UAVs), or drones, scout agricultural fields to collect important data in a fraction of time.

KSU graduate Daljit Singh leads phenotyping efforts in India for the Lab. He works on a process known as high-throughput phenotyping, where drones fly across wheat fields, measuring traits of reflecting light.

The work done by Poland’s team will contribute toward food security for world population expected to reach 9.8 billion people by 2050.



### Flu Season is Back....

Did you get your free flu shot yet? Flu viruses change from year to year, so it is important to get a flu shot each year. It’s free for people with Medicare, once per flu season, as long as you get the shot from a doctor or from other health care providers that accept Medicare. Protect yourself and your loved ones—get your free flu shot as soon as possible!

We will be hosting Walk Kansas again this year. Be Looking for further information from our office. March 17-May 11.

### Sharp decline in temperatures: Possible impact on the Kansas wheat crop

The sudden, sharp drop in temperatures across Kansas observed in the early part of November 2018 could have different consequences to the wheat crop, varying from no impact to some injury in particular fields. Temperatures dropped from around mid 50-60 degrees F on November 5 to approximately 20 degrees F the mornings of November 10-12.

The actual consequences of this temperature drop should be field specific, dependent on the region within the state, and on several other factors. The snowfall and moisture level in the topsoil will be important to help buffer possible injuries resulting from the cold temperatures. When more than 2-3 inches of snow is on the soil surface, it helps buffer temperature changes, thus protecting the wheat crop. Soil moisture is generally good in most of the state due to all the October rainfall, which should also help as it will cause the soil to have a better thermal buffer capacity, compared to a dry soil. When the average soil temperatures followed a similar trend to that observed for air temperatures, the minimum 2-inch soil temperatures measured across the state did not fall below 33 degrees F at any of the K-State Mesonet (<http://mesonet.k-state.edu/>) weather stations during the November 5-12 period. These soil temperatures could help buffer any negative effects of the sharp air temperature drop.

Possible exceptions could include fields planted in heavy no-till residue where the furrow might not have been closed properly at sowing, or where there was not good seed-soil contact. Under these conditions, the lack of furrow closure results in a less protected seedling (and in some fields, crown) which might be more exposed to cold

temperatures. Producers are encouraged to start checking for possible injury on lower portions of the fields and especially in no-till fields with heavy residue. The cold temperatures also will be more likely to cause injury to wheat if the plants were showing drought stress symptoms and soil temperature might have fallen, as dry soils will get colder more easily than wet soils. Additionally, the drier and looser the seed bed soil is, the greater the potential for the planting to be exposed to cold temperatures resulting in injury. Meanwhile, firmer and moister soils should help to minimize rapid fluctuations in soil temperatures allowing the wheat to better withstand cold temperatures.

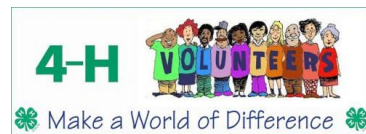
Another factor affecting wheat's response to the cold is whether the wheat had time to become properly cold-hardened. It is important to remember that a large portion of the Kansas wheat crop was planted late, after the October rainfall events; therefore, it is still too early to suggest that the wheat has been cold-hardened. In fact, many fields have not even emerged or are just now starting to emerge. In fields that have not yet emerged but in which seeds are already sprouted, no significant injury should be expected. This because recently spouted wheat...generally handles temperatures above 5 -10 degrees F well, and air temperatures never reached those levels, is still below the soil surface. The warmer soil temperatures will likely help buffer the seedling from being damaged from the cold. In fields where the crop has already emerged, temperatures around 15 degrees F or less can injure the newly emerged wheat, and these limits decrease as the crop progresses to tillering later in the fall and become more cold-hardy. Thus, some fields in western Kansas where the crop recently emerged, especially the northwest part of the state, could sustain some level of damage. We likely will not know for sure until temperatures warm up and give us an opportunity to scout. If fields were affected, the first symptom will be burndown of the wheat from the cold temperatures. If the wheat was larger-than-normal, the plants may look "rough" with a lot of brown, dead looking foliage on the soil surface. That does not mean the plants are dead. The important factor will be whether the crown below the soil surface remains alive. Having a well developed secondary root

system will help the plants survive. As temperatures did not drop as low in the central portion of the state, the concern with possible cold injury is not as great as fields that recently emerged in northwestern Kansas.

In summary, the extent of the unusually large and rapid drop in temperatures is a concern in certain scenarios described above. In fields that were planted earlier, if the wheat did not develop sufficient cold-hardiness, it will be more susceptible to injury for the recent cold snap.

### **Stay Strong, Stay Healthy Fitness Classes**

If one of your Goals for 2019 is to stay strong and healthy, we have the class just for you. Starting January 9th we will begin the 8 week program of Stay Strong, Stay Healthy. For more information please call the Extension Office



### **Give Back, Grow Here, Be A 4-H Volunteer!**

Want to know more about being a 4-H Volunteer?  
Want to improve your skills as a 4-H Volunteer?  
Need to update your annual Volunteer Certification? Rice County will be hosting a 4-H Volunteer Fair in January. Watch for registration information on our website [www.rice.k-state.edu](http://www.rice.k-state.edu) and the Rice County Extension and 4-H Program Facebook page. This interactive event will provide risk management best practices, mentoring strategies and positive youth development.

### **Master Cake and Cookie Mix**

1 pkg. cake flour (2-3/4 lbs)  
or 13 c sifted cake or soft flour  
1/3 c double-acting baking powder  
1-1/2 tbsp. salt  
8 c sugar (3-1/2 lbs)  
3 c hydrogenated shortening (1-1/4 lbs)

Stir flour, baking powder, salt and sugar to blend. Sift three times. Cut in the shortening with a pastry blender or electric mixer, or work it in with the fingertips until quite uniformly blended. A quick method for blending is to put ingredients into a dishpan and use an electric mixer at low speed until the desired consistency is reached (1-1/2 to 3 minutes). Store in covered container at room temperature. To measure Mix, pile it lightly into a cup and level off with a spatula. It makes about 23 cups of mix. This mix will keep three months without refrigeration.

General directions for Making a cake from the Master Cake Mix: Have ingredients at room temperature. Use the large bowl and a low speed or vigorous hand beating. While using mixer continually scrape the batter from the sides of the bowl into the beaters with a rubber scraper.

### Cake Recipes

#### Yellow Cake

3-1/3 c Master Cake Mix

3/4 c milk

2 eggs

1 tsp vanilla

Add 1/2 c of the milk to the mix; beat 2 minutes. Add remaining milk, eggs and vanilla; beat 2 minutes. Pour into two waxed-paper-lined 8 inch layer pans. Bake in a moderate oven (375 degree) about 20 minutes.

#### White Cake

3-1/3 c Master Cake Mix

3/4 c milk

3 egg white

1 tsp vanilla

Add 1/2 c of the milk to the mix; beat 2 minutes. Add remaining milk, eggs and vanilla; beat 2 minutes. Pour into two waxed-paper-lined 8 inch layer pans. Bake in a moderate oven (375 degree) about 30 minutes.

#### Apple Cake

3-1/3 c Master Cake Mix

1 tsp cinnamon

1/2 tsp cloves

1/4 c milk

1 c tightly packed grated apples

2 eggs.

Stir spices into the mix. Add milk and apples; beat 2 minutes. Add eggs; beat 2 minutes. Pour into a large shallow pan (about 8x12") lined with wax paper. Bake in a moderate oven (375 degrees) about 20 minutes.

### Cookie Recipes

#### Oatmeal Cookies

1 1/2 c Master Cake Mix

1 c quick cooking oats

1 tsp cinnamon

1 egg

1/2 c milk

1/2 c chopped nut meats

1/2 c raisins

Stir oatmeal and cinnamon into the Mix. Add remaining ingredients and blend thoroughly. Let stand 20 minutes. Drop by teaspoon on greased baking sheet. Bake in moderate oven (350 degrees) about 15 minutes. Yields 3 dozen.

#### Peanut Butter Cookies

2 c Master Cake Mix

1 egg

1/3 c peanut butter

Combine ingredients and blend thoroughly. Form into balls. Place on greased baking sheet. Press criss-cross indentations with a fork. Bake in a moderate oven (350 degrees) 10 to 12 minutes. Yields 30.

#### Coconut Cookies

2 c Master Cake Mix

1 egg

3/4 c shredded coconut

Combine ingredients and blend thoroughly. Drop by tsp on greased baking sheet. Bake in a moderate oven (350 degrees) about 10 minutes. Yields 30.

#### Date Bars

3 c Master Cake Mix

2 eggs

1/4 c milk

1 c chopped dates

1 c chopped nut meats

1/4 tsp cinnamon

Combine ingredients and blend thoroughly. Pour into 9"x13" pan lined with waxed paper. Bake in moderate oven (350 degrees) about 30 minutes. While warm cut into bars and roll in confectioners sugar. Yield 36 bars.

#### Hermits

3 c Master Cake Mix

1 tsp cinnamon

2 eggs

1 c chopped dates

1 c chopped nut meats

Stir cinnamon into the Mix. Add remaining ingredients and blend thoroughly. Drop by teaspoon on greased baking sheet. Bake in a moderate oven (375 degrees) 8 to 10 minutes. Yields 4 dozen.



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**Welcome to Rice County...[www.rice.k-state.edu](http://www.rice.k-state.edu)**

Your local Extension Office is a great resource for finding the information that you need. Have a gardening question? Check out our Lawn and Garden area. If you are interested in joining 4-H or being a volunteer, our 4-H Youth area has all the information you need to get Started. Check out the Crops and Livestock Section.

If you are not comfortable with using the computer we are only a phone call away 620-257-5131 or come and visit our office 701 East Main, Lyons.

Some of the services we offer are soil samples, pressure cooker check before you start your canning, cake pan check out, hay bale probe check out, Walk Kansas, Stay Fit and Stay Strong Program plus much, much more.