

# Agriculture Natural Resources Newsletter MARCH, 2023

 University of Kentucky  
College of Agriculture,  
Food and Environment  
Cooperative Extension Service

Cooperative Extension Service  
Mercer County  
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*Linda McClanahan*

Linda McClanahan, Mercer County Agent  
for Agriculture & Natural Resources



## 20<sup>th</sup> Annual Mercer County Farm/City Dinner



*Everyone is invited to come out and enjoy a steak dinner!  
Tickets are \$12 and can be purchased from any primary sponsor.*

Monday, March 20<sup>th</sup> 6:00pm  
The Stable, Mercer County Fairgrounds  
*"Why Can't You Motivate People?"*  
*Dr. Steve Isaacs*

*UK Agriculture Economics Management and Motivation Extension Specialist*

**Primary Sponsors**

Mercer County Farm Bureau  
Mercer County Conservation District

Mercer County Chamber of Commerce  
Mercer County Extension Service

Cooperative Extension Service  
Agriculture and Natural Resources  
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4-H Youth Development  
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LEXINGTON, KY 40546



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with prior notification.

## Getting Ready for Spring

By Derrick Snyder - National Weather Service Paducah, KY



March is when the traditional springtime thunderstorm season begins to ramp up in the Commonwealth. As we all know, some of these storms can be real doozies, and it's important we're prepared to weather them. Here's a few tips to help keep you and your loved ones safe:

1. **Stay informed:** Make sure you've got a weather radio or follow a trusted news station to stay on top of what's brewing. Your local National Weather Service offices offer free storm spotter training classes during this time of year, and these courses are excellent ways to learn about how severe thunderstorms form and how to stay safe around them. Call your local office to find out more information about a spotter training near you.
2. **Have a plan:** Make sure you and your family have a designated place to take shelter and a plan for how to stay in touch with one another during a storm. Write it down and keep it handy, just in case. Don't forget to practice your plan too!
3. **Stock up:** Keep a well-stocked pantry with enough non-perishable food and water to last a few days, in case of power outages or other emergencies. Other items to keep on hand in case of an emergency include extra clothes, medications, cash, and a first aid kit. See the list below for additional supplies.
4. **Secure your property:** Make sure any loose items around your property are secured to prevent them from becoming dangerous projectiles during high winds. Consider moving livestock to a safe place and securing any loose roof shingles to prevent damage to your home, farm buildings, or workshops.

Don't forget, there's plenty of resources out there to help you get prepared for severe weather. The National Weather Service, Federal Emergency Management Agency (FEMA), and your local emergency management office can all provide you with valuable information on what to do before, during, and after a thunderstorm. Learn more about making an emergency plan at [www.ready.gov/plan](http://www.ready.gov/plan).

So, don't wait until it's too late! Take a little time now to get ready for springtime thunderstorms in the Bluegrass State, and you'll be ready to weather whatever comes your way.



## There's Still Time to Be Counted in the 2022 Census of Agriculture

USDA's National Agricultural Statistics Service (NASS) has extended data collection for the 2022 Census of Agriculture through the spring to ensure all farmers and ranchers take advantage of the opportunity to be represented in the widely used data. It's not too late to respond online at [agcounts.usda.gov](http://agcounts.usda.gov) or by mail.



Census data inform decisions about policy, farm and conservation programs, infrastructure and rural development, research, education, and more. This is your opportunity to be heard through the ag census and help shape the future of American ag. Whether you farm thousands of acres or a rooftop, the most important thing is that you are counted. Respond today and learn more at [nass.usda.gov/AgCensus](http://nass.usda.gov/AgCensus).

## **STAND UNIFORMITY AND SOYBEAN YIELD**

***Dr. Dennis Egli, Professor Emeritus***

Are precise plant-to-plant spacings in the row and uniform seedling emergence necessary for high soybean yield? The importance of precise uniform stands is well known in corn, but is it important for soybean? The short answer is NO!

Plant-to-plant spacing in the row (spatial uniformity) and the timing of emergence of individual seedlings (temporal uniformity) are determined by the characteristics of the planter, the planting process and the seed bed. The proportion of the seeds that germinate and produce emerged seedlings and the planting date also influence stand uniformity. Spatial and temporal non-uniformity have the same effect on plant growth. Plants with wider in-row spacings or plants that emerge first (dominant plants) have access to more sunlight and grow faster than plants that are closely spaced or emerge later (dominated plants). The faster growing plants set more seeds than the slow growing plants. The effect on yield depends on the ability of the fast-growing dominant plants to produce enough 'extra' seeds to compensate for the reduced seed number on the dominated plants.

The key for soybean is that it can compensate - the early emerging (or widely spaced) plants produce enough 'extra' seeds to make up for the reduction in seeds on the late emerging (or closely spaced) plants so that the total seeds per acre and yield are not affected (compared to a perfectly uniform stand). The dominant plants have enough plasticity to make up for the loss of seeds on the dominated plants. Corn, on the other hand, usually cannot produce enough 'extra' seeds to make up for the loss on the dominated plants, so the seeds per acre and yield may be reduced.

The difference between corn and soybean lies in their reproductive plasticity. Plasticity (or flexibility) refers to the ability of the plant to increase the number of seeds it produces when grown in more productive environments. Soybean plants are very plastic; they can easily increase the number of pods and seeds they produce by branching to increase the number of nodes per plant, by increasing the number of flowers per node, and by decreasing flower and pod abortion when grown in favorable environments.

Most modern corn hybrids are not very plastic; they seldom produce multiple tillers and they often have only one ear per plant. When all of the florets on that ear produce seeds, the plant can no longer increase seed number which limits the capacity of the dominant plants to produce the necessary 'extra' seeds. When the dominant plants in non-uniform stands cannot compensate, seed number per acre and yield are reduced. Corn hybrids that are more flexible (i.e., produce multiple ears or ears on tillers) would do a better job of maintaining seed number and yield in non-uniform stands.

We tested these relationships in a soybean field experiment where we planted every other seed in the row either 4 or 7 days after the original planting and compared it to a control where all seeds were planted at the same time. The early emerging plants in the 4-day delay treatment produced 86 seeds per plant vs 52 seeds per plant on the delayed plants. Similar numbers for the 7-day delay treatment were 96 and 39 seeds per plant. The total combined yield of early and late emerging plants was the same as the uniform planted control in both years of the study. The soybean plant had the flexibility to adjust and maintain a constant yield in non-uniform stands.

It is important to note that soybean yield will be reduced if the variation of in-row spacing is so large that the plants cannot fill in the gap (creating a skip). If the gap is so large that you can see the soil when the soybean plants start flowering, the interception of sunlight by the plant community and yield will be reduced. Even a flexible plant like soybean can't compensate for gaps that reduce sunlight interception.

Interest in ultra-early plantings of both corn and soybean to increase yield have ballooned in recent years. Unfortunately, ultra-early plantings may reduce the uniformity of emergence and reduce corn yield. Low soil temperatures, often associated with these early plantings, delay emergence which increases non-uniformity of emergence. The longer the delay, the greater the non-uniformity. Low soil temperatures can also reduce the percentage emergence which would decrease spatial uniformity. Reducing average soil temperature from 68 to 58°F increased the time to 10% of final emergence of corn seedlings from 6 to 12 days in greenhouse and growth chamber experiments. This delay roughly doubled the non-uniformity of the resulting stand. Experiments with soybean produced similar results. Since soybean yield is not influenced by non-uniformity, planting soybean before corn in the early spring (as others have proposed) would reduce the effects of this temperature induced non-uniformity on overall-all yield. Planting in warm, moist soil and avoiding heavy rainfall before seedling emergence provides the best opportunity for rapid uniform emergence of both corn and soybean seedlings.





**PRIVATE PESTICIDE  
APPLICATOR TRAINING**

**Thursday, March 9, 10:00am  
or 6:00pm**

**Tuesday, March 14, 10:00am**

If you are planning to purchase any restricted-use pesticides, or your certification has expired, you need to attend this training. Certification is free and lasts for three years.

The program will take around 2 hours.

For private application, not commercial use.

To sign up, or for questions, please call me at 859-734-4378.

**Pesticide Safety  
Education Program**



**UK College of Agriculture**



**ONE-DISH BEEF STROGANOFF**

40 minutes 4 servings 330 Calories 34 G Protein

**INGREDIENTS:**

1 lb Ground Beef (93% lean or leaner) • 1/2 lb sliced button or cremini mushrooms • 3 tsp minced garlic • 1 tbsp chopped fresh thyme or 1 tsp dried thyme leaves • 2 cups uncooked whole grain wide noodle-style pasta • 1 can (14-1/2 oz) reduced-sodium beef broth • 1 cup frozen peas • 1/4 cup regular dairy sour cream plus additional for topping • 1 tbsp regular or coarse-grain Dijon-style mustard

**COOKING:**

Heat large nonstick skillet over medium heat until hot. Add Ground Beef, mushrooms, garlic and thyme; cook 8 to 10 minutes, breaking Ground Beef into 3/4-inch crumbles and stirring occasionally. Pour off drippings, as necessary.

*Cook's Tip: Cooking times are for fresh or thoroughly thawed ground beef. Ground beef should be cooked to an internal temperature of 160°F. Color is not a reliable indicator of ground beef doneness.*

Stir noodles and broth into beef mixture. Bring to a boil. Cover and cook 9 to 10 minutes or until noodles are tender, stirring twice. Stir in peas; continue cooking, uncovered, 3 to 5 minutes or until peas are heated through, stirring occasionally.

Remove from heat; stir in 1/4 cup sour cream and mustard. Season with salt and pepper, as desired. Garnish with additional sour cream, if desired.

*Cook's Tip: One pound beef Top Sirloin Steak Boneless, cut 1-inch thick may be substituted for Ground Beef. Cut beef steak lengthwise in half, then crosswise into 1/8-inch thick strips. Heat 1 teaspoon oil in large nonstick skillet over medium-high until hot. Add half of beef; stir-fry 1 to 2 minutes or until outside surface of beef is no longer pink. Remove from skillet. Repeat with 1 teaspoon oil and remaining beef. Keep warm. Heat 2 teaspoons oil in same skillet. Add mushrooms; cook and stir 3 to 5 minutes or until mushrooms are tender and begin to brown. Add noodles, broth, garlic and thyme; bring to a boil. Cover and cook as directed in Step 2, returning beef to skillet and stirring in peas as directed. Remove from heat and continue as directed in Step 3.*

**BREAKFAST  
WITH THE**

**Easter  
Bunny**

**Saturday, March 25  
8:00 -11:30 a.m.**

**Mercer County Fairgrounds  
"The Stable"**

**560 Linden Avenue  
Harrodsburg, KY 40330**

Enjoy a pancake/sausage breakfast  
Photo with Easter Bunny  
Petting Zoo, Easter Crafts &  
Facepainting

**Tickets \$7.00**

**Kids under 2 are free  
with paying adult**



Event sponsored by Mercer County 4-H

**YOUR DONATION**  
GIVE \$10 WITH EACH AG TAG

**YOUR COMMUNITY**  
HALF OF THE FUNDS FOR 4-H AND FFA COME BACK TO YOUR LOCAL CLUBS AND CHAPTERS IN YOUR COUNTY.

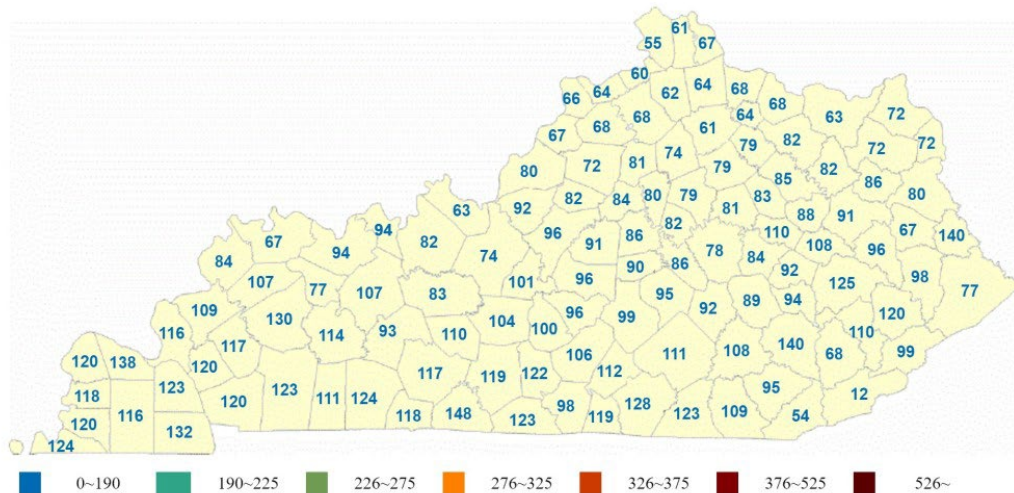
**OUR LEADERS**  
SUPPORT STATEWIDE PROGRAMS IMPACTING 274,000 STUDENTS ENROLLED IN 4-H, FFA AND KY PROUD MEMBERS.

BY MAKING A \$10 DONATION WITH YOUR AG TAG, YOU ARE CHOOSING TO INVEST DIRECTLY INTO THE FUTURE OF KENTUCKY AGRICULTURE. DONATIONS ARE DIVIDED EQUALLY BETWEEN FFA, 4-H AND KENTUCKY PROUD WITH HALF GOING DIRECTLY BACK TO YOUR COUNTY. THANK YOU FOR YOUR SUPPORT.

**Critical time to Begin Sampling for Alfalfa Weevil** Ric Bessin, Extension Entomology Specialist

The University of Kentucky Ag Weather Center’s degree day model for alfalfa weevil indicates that many counties in Kentucky are likely to exceed the 190 Degree Days (DD) used as a starting point to begin scouting by early to mid-March. Once temperature accumulations reach 190 DD, growers are advised to look at their alfalfa fields and begin their alfalfa weevil larval counts. So far, degree day accumulations for this year are trending close to average for the last 10 years.

Count from 01/01/2023, end in 02/20/2023



**Figure 1.** When degree day totals reach 190 Degree Days, it is time to begin scouting for alfalfa weevil larvae. Scouting continues at least on a weekly schedule until regrowth after the first cutting. Treat the DD totals for the counties as estimates.

Fall-laid alfalfa weevil eggs are the first to hatch in the spring. These eggs hatch earlier than those laid in the spring, and 190 DD approximates when first leaf feeding damage becomes noticeable. Temperature

extremes during the winter help to limit the survival of alfalfa weevil eggs that were laid in stems in the fall. Damage by the young larvae will first appear as tiny pin holes in the leaves.

**Scouting & Thresholds**

To scout for alfalfa weevil, use the stem sampling method. While walking in a “U” or “Z” pattern through a field, collect 30 alfalfa stems; carefully cup the top of each stem in one hand and break off the crown with your other hand, then place it bud-end downward in a plastic bucket. Be sure your samples are at least 20 feet from the edge of a field so that they are representative of the entire interior of a field. If the field is close to harvest, harvest can be an alternative to spraying, but producers need to watch for damage to the regrowth. There are similar scouting tables for regrowth after the first cutting.

**Alfalfa Weevil Larvae Thresholds for Spraying 190 to 225 Degree Days (Check your degree days)**

Average stem height (inches)	Number of alfalfa weevil larvae on 30 stems
2	27
4	67
6	100
8	130

**Alfalfa Weevil Larvae Thresholds for Spraying 226 to 275 Degree Days**

Average stem height (inches)	Number of alfalfa weevil larvae on 30 stems
2	15
4	19
6	20

For degree day accumulations above 275, use the economic threshold tables in [ENTFACT 127](#) or [ENT-17](#) to determine the need to spray the field for alfalfa weevil.

**Avoid Pesticide Resistance**

If you need to treat for alfalfa weevil larvae, keep in mind that insecticide resistance has been an issue in some areas. The best strategy to manage resistance is to use an insecticide only when necessary and to rotate modes of action each year. For many other pests I would recommend rotating more often, but alfalfa weevil has only one generation per year. To rotate modes of action, select insecticides that have a different IRAC group number on the label.





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**Thurs., March 23<sup>rd</sup> 6:00 PM @ Extension Office**

**Join us for our next 2023 educational meeting!**

**CATTLE MANAGEMENT MEETING**

**Mineral Nutrition: Southern States**

**Mineral Savings**

Alex Tigue, Cargill Animal Nutrition Beef  
Account Representative



**Cattle Facility Design**

Dr. Morgan Hayes, UK Biosystems &  
Agriculture Engineering Specialist

*This class qualifies for KADF CAIP  
Educational credit for the cost  
share program.*

***FREE Steak Dinner Provided By:***



**Pay dues/renew your membership  
to be entered in special drawing!**

**If you plan to attend in person  
please call the extension office  
859-734-4378 by Tuesday,  
March 21<sup>st</sup> to RSVP.**

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# SOUTH CENTRAL KY TOBACCO GROWERS MEETING

**Thursday, March 2, 2023**

Garrard County Extension Office  
1302 Stanford Road, Lancaster, KY 40444

6:00pm Meal begins—reservation required

6:30pm **Tobacco Production Update & Disease Management**

Dr. Bob Pearce, UK Tobacco Specialist

7:20pm **Tobacco GAP Certification & Update**

Amy Rochkes, Gap Connection Representative

8:30pm **Closing Comments & Announcements**

ALL tobacco growers are invited and *urged* to attend. This meeting qualifies for one hour commercial pesticide applicator CEU. This program is approved for GAP Certification and Re-Certification by all buying companies and market locations.

COOPERATIVE EXTENSION



**Make your meal reservations by noon, March 1 by calling your county office:**

Boyle—859-236-4484

Mercer—859-734-4378

Estill—606-723-4557

Lincoln—606-365-2447

Casey—606-787-7384

Madison—859-623-4072

Garrard—859-792-3026

Pulaski—606-679-6361

Rockcastle—606-256-2403

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RETURN SERVICE REQUESTED

- March 2 Area Tobacco Meeting & GAP Certification, 6pm, Garrard County Extension Office
- March 2 Fort Harrod Backcountry Horsemen Meeting, 7pm
- March 3 Central KY Ag Lenders Conference, Fayette County Extension Office
- March 4 Mercer County Fair & Horse Show Gala
- March 6 Mercer County Extension Council Leadership Appreciation Luncheon, noon
- March 9 Private Pesticide Applicator Training, 10am or 6pm
- March 12 Spring Forward! Daylight Savings Time
- March 14 Private Pesticide Applicator Training, 10am
- March 20 20<sup>th</sup> Annual Mercer County Farm/City Dinner, 6pm, The Stable
- March 21-27 National Agriculture Week
- March 21 Fort Harrod Goat Association Meeting, 6:30pm
- March 23 Cattle Management Meeting, 6pm
  
- April 3 BQCA Training, 6pm
- April 6 Fort Harrod Backcountry Horsemen Meeting, 7pm
- April 18 Fort Harrod Goat Association Meeting, 6:30pm
- April 22 Earth Day

