

Audrain County News

Mary Sobba, Ag Business Specialist
<http://extension.missouri.edu/audrain>

June 2018

Upcoming Events

June 8 – Food Safety Modernization Act (FSMA) Produce Safety Rule Grower Training – Jefferson City

For more information, call 913-307-7391. In response to the growing number of produce-related food safety outbreaks, FSMA was signed into law in 2011, with a goal of preventing contamination in the U.S. food supply. On-farm food safety is an area covered jointly by MU Extension and K-State Extension.

July 10 – MU Extension Summer Tax (TCJA) School 2018 – Columbia 8 a.m. to 4:45 p.m.

<http://extension.missouri.edu/audrain/agtax.aspx>
This school is for individuals and professionals preparing tax returns. This school will feature details of the new Tax Cuts and Jobs Act (TCJA) law. There will be an emphasis on the impact on agriculture, since one of the instructors is a nationally known agriculture lawyer. The day will also be covering individual issues, business issues and cyber security and more. Early bird registration (\$190) ends June 21st. After then registration is \$215. *This class meets the requirements for 8 hrs of continuing ed. with the IRS, Certified Financial Planner Board of Standards (applied 7 hrs) and the Missouri Bar CLE (applied).*

July 12 – Crop and Soil Management

Workshop – MU Bradford Farm - Columbia all day
For more information contact the farm manager Andrew Biggs 573-884-7945

Sept 8 – MO Pesticide Collection Event – Jefferson City 8 a.m. to noon

<https://dnr.mo.gov/env/hwp/pesticide/docs/jcflfier.pdf>
MFA Agri Services – Jefferson City
Free pesticide collection for Missouri farmers and households. Accepting all pesticides including: herbicides, insecticides, fungicides, rodenticides, dewormers, fly tags, fertilizer containing pesticides.
Sponsored by Missouri DNR

Local Markets are Open

The **Mexico Farmer's Market** is open Saturday mornings beginning at 8 a.m. in the Orscheln parking lot.

The **Clark Produce Auction** is open for the season. Auctions are held each Tues. & Fri. through Sept beginning each day @ 10:30.

Estimated schedule of auction items – weather dependent

April - Flowers, vegetable plants, & early produce

May – June - Flowers, greenhouse tomatoes, & strawberries

July – August - Tomatoes, cantaloupe, sweet corn, & full line of summer produce

Sept. – Oct. - Pumpkins & fall crops

Sale Dates

Oct. sale dates: 2, 5, 9, 12, 19, 26

The special fall Craft & Quilt Auction will be Sept. 21, 2018

What's in Your Birdfeeder? Screening Commercial Bird Feed Mixes for Viable Weed Seed Contaminants

By Eric Oseland, MU graduate student and MU weed scientists Many Bish and Kevin Bradley

Note: The following article was published in 2018 from the MU Bradford Research & Extension Center Farm. The research was conducted during the 2017 growing season. I have the opportunity along with a couple of farmers in the county of serving

on the advisory committee for the farm which is just east of Columbia. The research conducted at the farm is very interesting and is meant to be shared with farmers, so this is one way to share some small pieces. Please note – this is just one research study. If you are interested in more information contact Mary Sobba at the Extension Center and she can put you in contact with the researchers.

Troublesome weeds such as Palmer amaranth continue to invade new geographies in the United States each year. Commercial bird feed mixes are comprised of various seed that are under no federal regulations for weed seed contamination. Most bags of commercial bird feed contain mixes of seeds from many different agricultural fields, and often from different regions of the United States.

In 2016 and 2017, 60 bags of commercially available bird feed from 22 companies were examined for the presence of weed seed. All weed seed contaminants were removed, counted, identified by species and stored for future analysis. Results indicate that Amaranthus species were present in 57 of the 60 bags of bird feed examined, at amounts ranging from 1 to 6,512 Amaranthus seed per kg of bird feed.

Amaranthus species present in bird feed mixes include waterhemp (*Amaranthus tuberculatus* (Moq.) Sauer), redroot pigweed (*Amaranthus retroflexus* L.), Palmer amaranth (*Amaranthus palmeri* S. Wats), and tumble pigweed (*Amaranthus albus* L.). Palmer amaranth was present in 18 of the mixes screened. Seed of common ragweed (*Ambrosia artemisiifolia* L.), kochia (*Bassia scoparia*) shattercane [*Sorghum bicolor* (L.) Moench ssp. *arundinaceum* (Desy) de Wet & Harlan], wild buckwheat (*Polygonum convolvulus* L.) large crabgrass (*Digitaria sanguinalis*) and foxtail species (*Setaria* spp.) were also found in the bird feed mixes. A greenhouse assay to determine weed seed viability and resistance to glyphosate was performed after weed seed extraction. A discriminating dose of glyphosate at 3 times the labeled use rate was applied to Amaranthus species 5- to 10 cm in height to determine

glyphosate resistance. Results from this assay indicate that approximately 41% of Amaranthus seed in bird feed mixes remain viable, and four mixes screened to this point contained Amaranthus seed that were resistant to glyphosate. A stepwise regression was performed using SAS PROC REG to analyze ingredient effects on Amaranthus abundance in bird feed mixtures. The most predictive single ingredient that resulted in increases in Amaranthus species abundance was pearl millet followed by milo, nyjer thistle, and corn.

Additional statistical analysis indicated that bird feed mixes that contained milo, millet, corn, and sunflower all contained a significantly larger number of Amaranthus species than mixes that did not contain these ingredients. Results from this study will provide quantitative data about the potential involvement of commercial bird feed in the spread of economically important weed seeds throughout the United States.

New website

www.communitycommons.org

This site replaces the MU CARES site and has much more with mapping and data



Flag Day – June 14th



Your local link to MU for ag extension and research information
<http://agebb.missouri.edu/agconnection>

For more information
please contact your
MU Extension Center:

Adair
(660) 665-9866
Audrain
(573) 581-3231
Boone
(573) 445-9792
Callaway
(573) 642-0755
Chariton
(660) 288-3239
Clark
(660) 727-3339
Howard
(660) 248-2272
Knox
(660) 397-2179
Lewis
(573) 767-5273
Linn
(660) 895-5123
Macon
(660) 385-2173
Marion
(573) 769-2177
Monroe
(660) 327-4158
Pike
(573) 324-5464
Putnam
(660) 947-2705
Osage
(573) 897-3648
Ralls
(573) 985-3911
Randolph
(660) 269-9656
Schuyler
(660) 457-3469
Scotland
(660) 465-7255
Shelby
(573) 633-2640
Sullivan
(660) 265-4541

Farm Labor - Onboarding

This is part 3 of a series on farm labor. The other articles were in the March and April issues.

After recruiting and hiring a new employee, it is important to orient, engage, and train them to be successful. The first three months on the job determine if someone will stay, but research shows the first week is the most critical with nearly half of new employees deciding if they will stay. During this time, the orientation and engagement are priority, even over the training. Developing a prioritized checklist is a good place to begin the onboarding. Ask for feedback from the new employee about this checklist as an experienced person may overlook basic questions and concerns. The most productive and longest tenured employees are those who are passionate about the operation's success.

To begin the process, share about your business' vision, mission and goals, and provide an overview of other details, including who owns and runs the business and what the business values. Follow that introduction with a tour, and allow the employee to meet coworkers. While on the tour, point out basics, such as when does the work day start and end, where do you park, when and where do you eat lunch and where are the bathrooms. At that point, explain the job's important tasks, guidelines, policies and dress code. To give more specifics, show him or her how to record and submit timesheets; highlight items in the employee handbook; review the job description; share important contact information, including emergency services personnel, supervisors and discuss safety practices. If a new hire needs access to technology resources such as a computer, phone or email address, then reserve time for getting those devices and login information into the new hire's hands. Leave plenty of time to ask and answer questions. Keep in mind generational learning differences, as well as, differences in backgrounds. For example, someone who has a farm background, may need less training on the basics inherent to agriculture.

Mentoring is an effective way to engage new employees and can develop ties that last. It involves connecting colleagues who can help one another learn and develop a plan to reach certain individual and business goals. Consider the goals that you'd like the program to achieve. For individuals, those goals may include improving time management, gaining a new certification or becoming a better communicator. For the employer, supporting a mentoring program may generate stronger leaders, sharper skill sets and improved internal networking.

Mentoring can be formal or informal, with most agriculture related businesses being informal. An informal approach lets mentors and mentees choose what this looks like based on the individuals. Look for opportunities to pair mentors and mentees. An ideal mentor-mentee pairing may match employees based on similar interests or backgrounds, aptitude levels, mentoring experience expectations, individual choice or other characteristics. After matching mentors and mentees, periodically check the status of the mentoring relationship. If a pairing doesn't ultimately work, then offer employees the option to change to a different pairing.

Facilitating a mentorship relationship is helpful for less experienced workers; however, employees with more experience can also benefit. Through mentoring, experienced employees can teach those who are less experienced and make themselves better managers. Employees with less experience —the mentees — can contribute new ideas that veteran employees can help to foster. Mentoring can fulfill personnel development needs that other onboarding or training efforts may overlook. Employees may need some convincing that mentoring is a good use of their time. Help them understand the value by explaining the mentoring program's goals and describing how they can benefit. Mentoring can strengthen the business, as well as, grow employee productivity, loyalty, and skill level.

Onboarding is as an important component as recruitment or hiring. Invest the time with new employees to incorporate them into your farm team. Regularly ask what is going well and what can we improve? The results will include a higher employee retention rate and improved farm productivity.

Source: *Darla Campbell, ag business specialist*

Corn and Soybean Replant Decisions

Deciding whether to replant a sparse stand is one of the more difficult decisions for a corn or soybean grower. The difficulty of this decision stems from predicting how the effectiveness of replanting will be affected by the combination of planting date and changing environmental conditions. However difficult, replant decisions are made by at least some Missouri farmers every year.

University of Missouri Extension guide G4091 titled “Corn and Soybean Replant Decisions” provides a step-by-step procedure for estimating dollar gain or loss from replanting. This procedure involves a careful study of the field in question and an analysis of its yield potential. The procedure begins with determining the cause of the sparse stand. Next, information is gathered on the stand density and condition of the stand. This information is used to estimate the yield potential and income from the current stand. Next, the guide provides tips on determining the cost to replant and estimating the yield potential and income from the replanted stand. With this information in hand the original stand income estimate can be compared to the replant stand income estimate to determine the economic benefit from replanting.

The corn and soybean replant decision guide (G4091)

is four pages long, and provides a one-page fill-in-the-blank worksheet that can be filled out with information from the field in question. Research based estimates of crop yield based on planting date are provided for use in estimating the replanted stand yield based on planting date. Planting date trials in central and north Missouri provided the data used in the estimates shown in the following table from Guide G4091.

Table 5. Effect of planting date on corn and soybean yield in central and north Missouri.

Corn		Soybean	
Planting date	Yield as percent of expected	Planting date	Yield as percent of expected
May 1	94	May 8	99
May 6	92	May 15	98
May 11	89	May 22	96
May 16	86	May 29	93
May 21	83	June 5	89
May 26	80	June 12	84
May 31	77	June 19	79
June 5	75	June 26	72
June 10	71	July 3	65
June 15	65	July 10	54

To determine whether replanting is appropriate, compare the net income from replanting with the income from a sparse stand. Even if this comparison is positive, a producer still may not wish to replant. Other demands on time and competing crop management issues are important considerations.

The worksheet provided in guide G4091 can help in organizing the important information and arriving at a well-informed decision. It is followed by an example of a completed worksheet with a note about the probable decision. A Microsoft Excel workbook containing the replant worksheet calculations is available at <http://agebb.missouri.edu/download/university/replant.xlsx>.

Source: *Max Glover, agronomy specialist*



Farmers Need to be at the Table - Now More than Ever

Farmers have always been hard workers, putting in long hours, and producing very well. The one area many farmers do not speak out on in is letting their thoughts and wishes be known to policy makers. All of the issues currently facing Agriculture and rural Missouri make it extremely important to listen and come to the table. Coming to the table not only means being actively involved in organizations but contacting legislators too.

Some of the important issues coming up or being discussed at the national level:

(a) **The 2019 Farm Bill.** The Farm Bill technically runs until 2019 but Congress is already discussing and debating some of the measures. This article cannot explain all the issues that will come up, but several are very important. First, what adjustments if any will be made to the Price Loss Coverage (PLC) and Agricultural Risk Coverage (ARC) programs? The cost of PLC and ARC has been lower than anticipated in the current farm bill due to commodity prices. Second, experts agree we are going to have lower prices (barring adverse weather throughout the country) so what provisions could be discussed to assist farmers in financial stress, if any?

(b) **Global Trade.** Agriculture has had a very positive trade balance for many years. Policies under the current administration could have a negative impact on that which could hurt farmers especially. This continues to change by the day so keep up.

(c) **The Tax Law Overhaul.** In December, a major tax legislation was signed into law. The biggest changes in thirty years. The IRS and others are still interpreting what impacts it will have on farmers. The 1099A or coop issue has already been “fixed” but others could come too.

(d) **Environmental Concerns.** There remain environmental groups that want to curtail or even eliminate some chemicals farmers utilize. These groups have lost some influence under our current administration but remember things change quickly in Washington.

Those above are just what is happening on the Federal level primarily. There are also state of Missouri issues to be aware of:

(e) **Adverse possession.** This is not a new topic. It relates to land not owned but used more than 10 years

consecutively. For example, a fence not on a property line and in pass for many years. The Missouri legislature had a bill doing away with this last year but it failed to pass. It may come up in the again in the future.

(f) **Fences and boundaries.** Missouri is unique in the fact there are two different fence laws. A state law change in 2016 requires non-livestock owners to prove negligence on the part of livestock owners to get damages. Non-livestock owners might push to make changes friendlier to them at some point.

(g) **Soil and water quality.** Soil and water conservation are important. Missouri has a statewide program coordinated through the soils and water districts to help landowners reduce erosion and improve water quality. Small communities and individual households need to follow sewer regulations too. Households with under 5 acres must have a sewer system, possibly smaller acreages if a lender requires it. Smaller communities may have to look at upgrading or installing a system.

(h) **Extension funding.** Another issue is University of Missouri funding which directly affects Extension funding. Due to budget restraints, Extension has lost people in the field and on campus and continues to do with less but there is a limit.

There are organizations lobbying for agriculture (Farm Bureau, MFA, etc.) that welcome input from farmers and rural landowners. There are more options available today in contacting legislators. In addition to calling via telephone, individuals can be contacted by e-mail or text. Finally, there are elections coming up so it is important to get to know the candidates stand on agricultural related issues. There are sources of what is happening on the Internet in addition to media sources. Be certain it is current and unbiased. Contact your legislator, do not assume others will. The occupation and livelihood you affect could be your own.

Source: Joe Koenen, ag business specialist

2018 University of Missouri Field Days

Online calendar <http://cafnr.org/events/>

Bradford Research Center near Columbia will host a Pest Management Field Day on Tuesday, July 10

Bradford Research Center will host a Crop and Soil Management Workshop on Thursday, July 12.

Bradford Research Center will host a Vegetable Grower Field Day on Thursday, Aug. 2.

Greenley Research Center near Novelty will host a field day from 7 a.m. to 2 p.m. on Tuesday, Aug. 7.

Graves-Chapple Research Center will host a field day on Tuesday, Aug. 28 at the Center near Rock Port. Hundley-Whaley Research Center will host a twilight tour on Tuesday, Aug. 28 at the Center in Albany.

Bradford Research Center will host a Tomato Festival on Thursday, Sept. 6.

Forage Systems Research Center will host a field day on Tuesday, Sept. 11 at the Center near Linneus.

Southwest Research Center will host a field day on Thursday, Sept. 13 at the Center near Mt. Vernon.

Thompson Research Center will host a field day on Thursday, Sept. 20 at the Center near Spickard.

South Farm Research Center - annual South Farm Showcase on Saturday, Sept. 29 (Columbia).

Wurdack Research Center will host a field day on Friday, Oct. 5 at the Center near Cook Station.

The Missouri Chestnut Roast is scheduled for Saturday, Oct. 6 at the Horticulture and Agroforestry Research Center in New Franklin.

Source: Max Glover, agronomy specialist

Area Grazing Schools

Boone / Howard counties June 14 - 15
Fayette, MO For details call: 660.248.3358 ext. 3

Putnam County Sept. 20 - 21 Unionville, MO
For details call: Valerie Tate 660-895-5123

Ralls County June 7 - 8
For details call: Lucas Brass 573.985.8611 ext. 110