

Bourbon County Cooperative Extension Service

AGRICULTURE & NATURAL RESOURCES NEWSLETTER



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

May & June
2023

Lindsay Arthur

Lindsay Arthur
Agent for Agriculture
& Natural Resources
lindsay.arthur@uky.edu

**Bourbon County
Extension Service**
603 Millersburg Road
Paris, KY 40361
Office: (859) 987-1895
Fax: (859) 987-3120
bourbon.ca.uky.edu

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development



Bourbon County Fair and Horse Show
June 26th - July 1st 2023



KY Sheep and Wool Producers Field Day

Location: Winding Creek Farms,
801 Muse Hollow Rd,
Tompkinsville (Monroe Co), KY
42167

Fee: FREE!

Enjoy Monroe Co. lamb bbq!

- Working dog demo
- Farm tour
- Sheep handling basics
- Sheep marketing panel
- Networking with producers

SAVE THE DATE
June 3, 2023

Sponsored by:
CPC, Four Hills Farm,
Brewer Livestock,
Creekside Vet Clinic, Tarter,
SEKSPA, Monroe County
Extension

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LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.



Mobile Apps in Farm Management :

*Source: Dr. Jordan Shockley, Extension Associate Professor
University of Kentucky*

Have you ever found yourself wishing there was an app for something while using your smartphone? You're not the only one. The development of mobile apps for various needs is happening at a rapid pace. Why? According to comScore, 89% of all mobile minutes are spent on mobile apps. The top two categories for mobile app users are social media and news/information. In agriculture, there are mobile apps available that deal with an array of topics. CropLife puts out a list of the best agriculture apps every year. The majority of those mobile apps, and the most popular, are often agronomic or weather related. In the economic space, most of the available apps provide pricing information for marketing. However, there are a host of available apps that can assist with farm management.

I often get asked, "What is the best farm management app out there?" My colleague had the best answer to that question, "the best farm management app for farmers is the one that you will actually use!" Each app serves a different purpose and provides a different user experience. We've recently created an extension publication that outlines all of the mobile apps we could find that help farm management and their availability on Apple or Google smartphones (publication found at the link below). If you want a more detailed description of each app, you can find it in the 2nd link below. I encourage you to download several apps and try them to see which works best for your specific situation or need.

'Are Corn Yields increasing faster than Soybean Yields?'

Corn and soybean yields increased steadily since the beginning of the high-input era of agriculture in the 1940s and '50s. Improved varieties (hybrids) and better management practices drove these increases. Many producers believe that corn has benefited more from improved technology than soybean. Are corn yields increasing faster than soybean yields?

The fact that these two crops are very different lends credence to this observation. Corn is a grass of tropical origin with C4-type photosynthesis that produces a high starch seed. Soybean originated in northern China; it is a legume with C3-type photosynthesis that produces a seed containing high levels of oil and protein. Corn responds readily to N fertilizer; soybean, as a legume, makes its own N. The C3-type photosynthesis in soybean responds to higher CO₂ concentrations in the air, corn does not. Historically more breeding effort has been allocated to corn than to soybean. Given these differences, it would not be surprising if there were differences in the rate of yield improvement. The evidence, however, suggests that the rates are about the same for both crops.

One way to look at this question is to evaluate changes in the ratio of corn yield to soybean yield over time. The ratio will increase if corn yield is increasing faster than soybean yield. This ratio, calculated from average U.S. yields (after conversion from bushels/acre to pounds/acre), did not change from 1980 through 2019 (Figure 1). Yields of both crops increased steadily during this period, but the relative rate of increase was the same. Dr. Jim Specht at the University of Nebraska also found no difference in relative growth rates between the two crops.

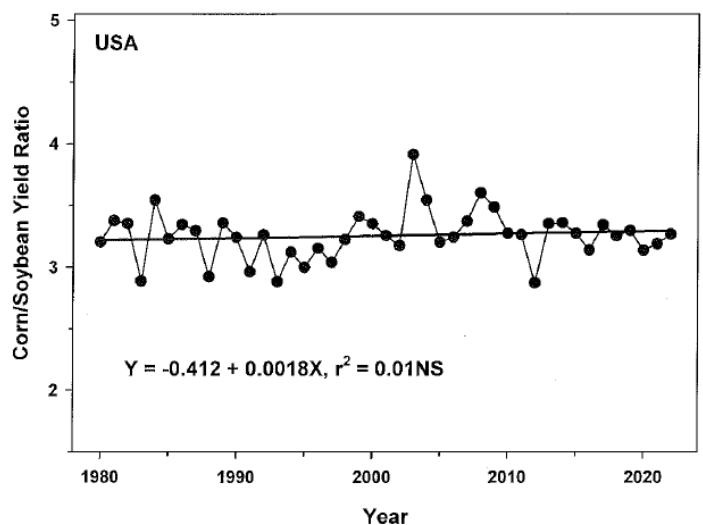
The ratio in Figure 1 fluctuated from year to year as the weather and growing conditions affected the yield of the two crops differently. In some years, corn was favored (higher ratio), in other years, soybean was favored (lower ratio), but, on the average, the ratio did not change.

If we go farther back in time, back to the beginning of the high-input era of agriculture, the ratios (using

average state yields from Indiana, Illinois, Iowa, Kentucky, Tennessee, and Missouri) increased steadily from 1950 (when the ratio was approximately 2.0) through the late 1970s (high-yield states) or 1980s (low-yield states) before they plateaued at approximately 3.0. During this early period, corn yields were increasing faster than soybean yields, so the ratios increased, but after they plateaued, there was no further change in the ratio through 2019, except for Iowa, where it increased very slowly (but significantly).

Yield ratios did not change from 1972 through 2015 in most of the counties in Kentucky and Nebraska (irrigated only). However, 30 of 47 counties in Iowa showed small, but significant, increases in the ratio, but they were usually less than 0.002 ratio units per decade. Four of the six counties in Kentucky with most of the soybeans double cropped after wheat also showed significant increases in the ratio over time, reflecting the lower rate of yield growth of the late planted double-cropped soybeans.

Figure 1. Ratio of US corn yield to US soybean yield from 1980 to 2022. Yields were converted from bushels per acre to pounds per acre before calculating the ratio. Adapted from Egli, D.B. 2021. Applied Crop Physiology. Understanding the Fundamentals of Grain Crop Management.



Source: By Dr. Dennis Egli, Professor Emeritus, University of Kentucky Plant and Soil Sciences.



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June Tips & Tidbits

Prevent Overgrazing of Pastures and Paddocks

- Repeated overgrazing over time will deteriorate any pasture or forage system.
- A good way to check if you are overgrazing a horse pasture is to see if manure piles are in excess on a pasture field. While also observing how close the horse(s) are grazing to the manure, the closer they get, the more overgrazed the pasture has become.
- If you have no other options to reduce overgrazing, herd downsizing should be considered, or a supplemental feed source should be supplied.

Weaning Foals

- The process of weaning is a natural activity, but one horse owners need to prepare for.
- To minimize stress on the foal, the mare and the owner consider the following tips:
- Wean foals at 4 to 6 months of age.
- Get the foal used to consuming other feed—forage and the concentrate it will be fed after weaning—2 to 3 weeks prior to weaning. Use a creep feed at the rate of 1 pound of feed per day per month of age of the foal; remove any feed not consumed daily and replace with fresh feed.
- Make sure foals are healthy and used to being handled.
- Wean in a safe place the foals are accustomed to.
- Remove the mares. Total separation means moving 1 or 2 mares from the oldest foals to a place on the farm out of sight and hearing. Gradual separation means moving 1 or 2 mares to a pasture or paddock adjacent to the foals to allow for contact, but no nursing. After 5 to 7 days, move the mares out of sight and sound. Removing a couple of mares at a time will give the newly weaned foals companionship, which can aid in the adjustment process.
- Watch feed consumption of foals who have just been weaned. They may need up to 21 days to completely recover from the separation. During this time they may back off eating.
- Be prepared to deal with this stressful time.

Post Weaning Mare Management

- Reduce the grain intake of the mares to reduce milk production.
- Adjust the mare's feeding program to meet her requirements after milk production has stopped.
- Adjust Body Condition Score as needed by adding a grain ration to a mare in a BCS below a 5 or possibly removing the grain from the feeding program if the mare is gaining in body condition or is above a BCS of 7.



May is National Beef Month!

THE UNITED STATES REMAINS THE WORLD'S LARGEST PRODUCER IN 2023 AND IS NOW THE SECOND-LARGEST CONSUMER OF BEEF IN THE WORLD. THE BEEF INDUSTRY INVOLVES THOUSANDS OF AMERICAN FARMERS, RANCHERS, AND PROCESSORS WHO HELP KEEP OUR ECONOMY STRONG & FOOD ON OUR TABLES.

The American beef industry raised approximately 28.4 billion pounds of beef in 2022, accounting for just under 22% of the world's total beef production. According to the [USDA](#), tightening cattle supplies are expected to cause a significant year-over-year decrease (around 6%) in domestic beef production — the first decline since 2015.

With production down slightly, consumer prices are expected to rise, which may provide some relief to the industry, which has also suffered windfalls in the last three years due to ongoing drought conditions and inflating costs of production.

Beef is an important source of nutrients that are vital for supporting good health, such as protein, Vitamin B12, zinc, iron, phosphorus, and selenium. And it's not just about hamburgers and steak: foods containing gelatin (including ice cream and marshmallows), chewing gum, medicines, and soaps are among the many derivative products that rely upon the beef industry.



Source: RFD-TV

The Markets :

Cattle prices were lower last week in most markets and futures prices declined last week. Feeder cattle futures contracts were down about \$8 per cwt in trading last week but are currently up about \$1 in today's trading.

Source: MSU Department of Agriculture Economics

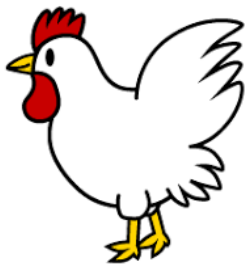
Cattle Market Report Prices \$/cwt. Sources: USDA, LMIC, and CME		For Weeks Ending On			% Chg Prev. Week	% Chg Prev. Year	Chg Prev. Week
		5/5/23	4/28/23	5/6/22			
500-600 lb. Feeder Steers	Mississippi M/L #1-2	\$211.05	\$216.94	\$153.71	-3%	37%	(\$5.89)
	Arkansas M/L #1	\$234.65	\$230.21	\$175.72	2%	34%	\$4.44
	Kentucky M/L #1-2	\$229.24	\$226.57	\$176.19	1%	30%	\$2.67
	Oklahoma City M/L #1-2	\$231.24	\$227.12	\$175.80	2%	32%	\$4.12
	Alabama M/L #1	\$227.45	\$232.51	\$166.88	-2%	36%	(\$5.06)
	Tennessee M/L #1-2	\$223.37	\$228.53	\$168.94	-2%	32%	(\$5.15)
	Missouri M/L #1-2	\$237.74	\$236.34	\$176.71	1%	35%	\$1.39
700-800 lb. Feeder Steers	Mississippi M/L #1-2	\$175.06	\$176.31	\$131.92	-1%	33%	(\$1.25)
	Arkansas M/L #1	\$191.28	\$196.71	\$151.87	-3%	26%	(\$5.43)
	Kentucky M/L #1-2	\$192.64	\$194.49	\$149.68	-1%	29%	(\$1.84)
	Oklahoma City M/L #1-2	\$195.69	\$193.76	\$153.16	1%	28%	\$1.93
	Alabama M/L #1	\$184.30	\$187.50	\$138.63	-2%	33%	(\$3.20)
	Tennessee M/L #1-2	\$190.85	\$192.39	\$143.35	-1%	33%	(\$1.54)
	Missouri M/L #1-2	\$200.79	\$193.90	\$153.79	4%	31%	\$6.90
Negotiated Fed Steers	Live Price	\$173.93	\$177.15	\$143.42	-2%	21%	(\$3.22)
	Dressed Price	\$280.94	\$284.05	\$230.69	-1%	22%	(\$3.11)
Boxed Beef Cutout	Choice Value, 600-900 lb.	\$309.41	\$309.30	\$258.29	0%	20%	\$0.11
	Select Value, 600-900 lb.	\$288.49	\$288.34	\$246.82	0%	17%	\$0.15

Futures Prices		5/5/23	4/28/23
Live Cattle	June	\$161.93	\$165.48
	August	\$159.50	\$163.77
	October	\$163.57	\$167.63
Feeder Cattle	May	\$202.52	\$210.98
	August	\$221.43	\$230.73
	September	\$225.05	\$233.80
Corn	May	\$6.53	\$6.36
	July	\$5.97	\$5.85

Source: CME Group

10 Backyard Chicken Basics'

Source: Jacquie Jacob, Extension Poultry Project Manager



Having a small chicken flock in the backyard is very popular these days. To have a successful flock producing eggs for your family, you'll want to learn the basics.

1. Make sure you check your local city and county ordinances to ensure you're able to have a backyard flock. Some ordinances require a minimum amount of land and some subdivisions and homeowners' associations have their own rules.
2. Chickens require daily care. You must feed them, provide clean water and collect eggs every single day. Managing a small flock is an excellent opportunity to teach children a certain amount of responsibility, but ultimately, you'll oversee the health and well-being of your flock.
3. Birds get sick and it may be difficult to find a veterinarian to provide care for them.
4. Cleanliness and sanitation are critical elements in caring for a small flock. Everyone must wash their hands before and after handling the birds. Also, no matter how tempting, avoid bringing your chickens into the house and don't use your kitchen sink to wash equipment.
5. Poop happens. Chickens eat a lot and hens use about 60% of the feed they consume and excrete the other 40% as manure. You must have a plan for that manure. One option is adding it as an odor-free fertilizer for your home garden.
6. Keep it down. Chickens make noise. Only roosters crow, however, hens are not always quiet and can make a lot of noise letting everyone know they just laid an egg.
7. The egg season will come to an end. Chickens stop producing eggs at some point in their lives and may live a long time beyond their egg-laying years. Have a plan for what you will do with hens that stop producing. If you keep them as pets, you'll have to keep feeding them and providing other resources for their care.
8. Housing is a big part of keeping a flock. Your birds will need a house that provides shelter from the weather, nest boxes for egg laying and perches for roosting at night. Make sure housing is easy to clean and provides protection from predators. You'll have to manage their bedding well to prevent rodents from making your chickens' house their home.
9. Scratch that. Chickens scratch when they forage. If you let hens run free, you may need to place a fence around your garden if you don't want the birds to destroy it.

Know how to get chicks. You will most likely want to raise your hens from chicks. You can buy them online and have them shipped to your home, but some suppliers have minimum quantities for orders. You may have neighbors or friends who also raise chickens willing to join you in an order. Remember you'll need to provide new chicks with a heat source, such as a lamp, for at least six weeks.



2023 Pest Management Field Day at the UKREC Farm June 29, 2023

Location: 1205 Hopkinsville St., Princeton, KY 42445
Time: 8:30 a.m. to 12:30 p.m. CDT — Sign-in begins at 8 a.m. CDT



Pre-registration is highly recommended by June 22, 2023
by either scanning QR Code, clicking web link, or by telephone.

https://uky.az1.qualtrics.com/jfe/form/SV_4PjveAug6mK9rXU
Or contact the UKREC at (270) 365-7541, ext. 22569.

Topics and Speakers

- Palmer amaranth and Waterhemp control *Travis Legleiter*
- Weed Control in early planted soybean
- Weed Control in corn
- Italian ryegrass Research Update
- Herbicide Resistant Johnsongrass *JD Green*
- Weed Management utilizing cover crops *Erin Haramoto*
- Corn Disease Research Update *Kiersten Wise*
- Entomology Research Update *Raul Villanueva*

Continuing Education Units for
Certified Crop Advisors and Kentucky pesticide applicators available

Follow us on Twitter: @TravisLegleiter and @KYGrainCropsIPM
Like us on Facebook: KY Grain Crops IPM

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or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed,
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status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky,
Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.
LEXINGTON, KY 40546



Forage Timely Tips: May

- Start hay harvests for quality forage. Consider making baleage to facilitate timely cutting.
- Seed warm season grasses for supplemental forage once soil temperature is at 60 F.
- Clip, graze, or make hay to prevent seedhead formation.
- Rotate pastures as based in height rather than time.
- Consider temporary electric fencing to subdivide larger pastures and exclude areas for mechanical harvesting. Scout pastures for summer annual weeds and control when small.

Plate It Up Kentucky Proud Recipe



Very Berry Salsa

- | | | |
|---------------------------------------|--------------------------------------|-------------------------------------|
| 4 cups apples,
finely diced | 1 cup raspberries,
halved | 1 tablespoon fruit preserves |
| 1 cup blueberries | 1 cup blackberries,
halved | ½ tablespoon sugar |
| 1 cup strawberries,
diced | | ½ tablespoon brown sugar |

In a large bowl, **combine** apples and berries. In a small bowl, **mix** together preserves and sugars until well blended. **Pour** preserve mixture over fruit and **toss** to coat. **Cover** and **chill** in the refrigerator for at least 30 minutes.

Yield: 32, 2 ounce servings
Nutritional Analysis: 20 calories,
0 g fat, 0 mg cholesterol, 0 mg sodium,
5 g carbohydrate, 1 g fiber, 4 g sugar,
0 g protein



Buying Kentucky Proud is easy. Look for the label
at your grocery store, farmers' market, or roadside stand.