The April 2021 Edition of:

Nikki's Newsletter

Marshall County's Agriculture and Natural Resources Update

University of Kentucky
College of Agriculture, Food and Environment

Cooperative Extension Service
University of Kentucky
Marshall County
1933 Mayfield Highway
Benton, KY 42025
(270) 527-3285
extension.ca.uky.edu

It's time! All of a sudden it seems like mowing is my full time job and the dandelions like to make my freshly cut lawn look like it belongs next to a vacant house the next day. Oh the joys of springtime.

The anhydrous buggies are rolling, rigs are spraying and field **corn** is being planted. Determining when to start planting can be tricky. The most critical factor in determining when to start planting corn is the soil temperature. Planting when soil temperatures are above 50°F at a 2-inch depth for three or four days appears to be an excellent guide. A soil temperature of 50°F at 7:00 a.m. or 55°F at 1:00 p.m. should assure that temperatures are suitable for germination and growth for at least several hours during the day. Because of residue cover, soils for no-tillage planting usually do not warm up as early as tilled soils. If using no-till, planting may have to be delayed by four to seven days.

With the decrease in **Covid-19** cases, UK has loosened the meeting restrictions again. If proper precautions are taken, I can host programs inside the meeting room as long as masks are worn and 6 feet of social distance is observed. It's not the optimum time, since everyone is busy in their fields and gardens, but I will still take the win! Speaking of wins, congratulations to the **Lady Marshalls Basketball** team on their second place winning run at the state title!

Be sure to checkout the **Small Diversified Farm Series** flyer on page 2. Small farmers are often left out of traditional programing because of their diversity and size. Therefore, we (a group of west Kentucky agents) decided to offer this series. Topics will not be specialized in any one area but will instead cover topics related to all areas of small farming.

Don't forget that the **Marshall County Farmers Market's** opening day and the **Master Gardener Plant Sale** (page 3) are both on May 15th. See you there!

I hope everyone has a safe and profitable planting season!
You know where to find me. Happy mowing!

IN THIS ISSUE:

HAVE A SMALL DIVERSIFIED FARM? WANT TO EXPAND THAT FARM INTO A BUSINESS VENTURE?

College of Agriculture, Food and Environment
Cooperative Extension Service

Small Diversified Farm Series

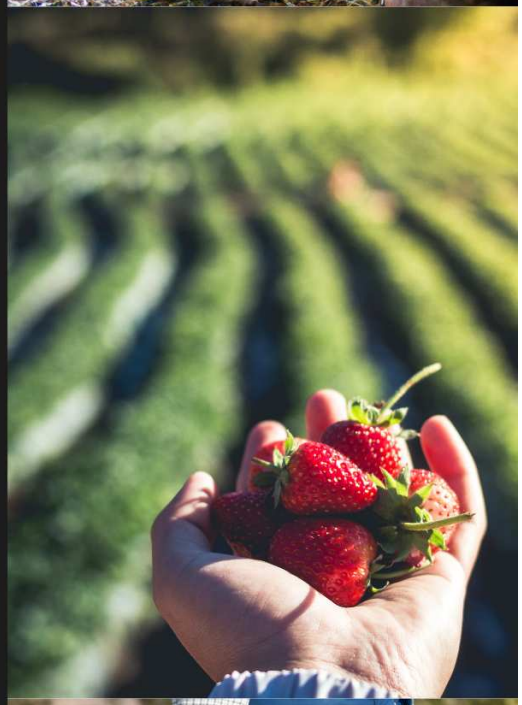
GRAND RIVERS COMMUNITY CENTER
155 W CUMBERLAND AVE
GRAND RIVERS, KY
6:00 PM

APRIL 29- MARKETING FOR ALL

Speakers: UK Center for Crop Diversification
Emily Spencer- UK Ag Econ Extension Associate
Savannah Columbia- UK Ag Econ Extension Associate

CALL YOUR COUNTY EXTENSION OFFICE TO REGISTER:

CALDWELL: 270-365-2787
CALLOWAY: 270-753-1452
CRITTENDEN: 270-965-5236
LIVINGSTON: 270-928-2168
MARSHALL: 270-527-3285
MCCRACKEN: 270-554-9520
TRIGG: 270-5223269



Marshall Master Gardener's
5th Annual Plant Sale

Saturday, May 15th
8:00am- 12:00pm
@ the Marshall County Farmers Market
located at the Marshall Co. Extension Office
1933 Mayfield Hwy, Benton KY, 42025
270-527-3285

Trees, shrubs,
vines, vegetables, groundcovers,
fruit, herbs, bulbs,
annuals, perennials, houseplants,
compost and more!

- LOW PRICES
- GARDENING ADVICE
- DOOR PRIZES
- FARMERS MARKET

Plant sale proceeds (excludes farmers market) go to the MMGA and are used for Master Gardener educational opportunities, scholarships for agriculture students, community projects and more!

***Due to COVID-19, six foot social distancing and masks will be required. ***

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

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LEXINGTON, KY 40546

Disabilities accommodated with prior notification

Soybean Residual Herbicide Decision

Dr. Travis Legleiter, Asst. professor of Weed Science

The successful control of waterhemp and Palmer amaranth in soybean has consistently come back to the use of a residual herbicide at soybean planting. Furthermore, the University of Kentucky along with numerous other academic institutions have shown that residual herbicides with multiple effective sites of action provide the most consistent control of waterhemp and Palmer amaranth.

While the concept of using a multi-site of action residual sounds easy enough, the decision of which residual herbicide to use can be overwhelming when looking at the laundry list of options now available. To assist farmers and crop consultants in making a final decision on which residual herbicide to use, the University of Kentucky has produced the "Multi-SOA Pre-emergence Herbicides for Palmer Amaranth and Waterhemp Control" publication.

This publication features a table that includes the majority* of pre-mixed residual herbicide available on the market that contain at least two or three effective sites of action for control of Palmer amaranth and waterhemp. The goal of this publication is to enable famers and consultants to compare pre-mix products and see what they are getting in each pre-mix at differing rates.

The publication is available at: http://www2.ca.uky.edu/agcomm/pubs/AGR/AGR259/AGR259.pdf or contact your local extension agent for potential access for hard copies of the publication.

* Fortunately for famers there are new multi-SOA products continually coming onto the market, but unfortunately that means this publication does not always contain a complete list of products currently available. The publication will be updated annually with new products that have been released since the last revision of the publication.

Crop Scouting Clinic

We are excited to announce that The Crop Scouting Clinic will be held at the University of KY Research and Education Center on May 20, 2021. Sign in will begin at 8:30 and the program will run from 9 to 4. Lunch will also be provided. This workshop is ideal for interns, new agents, and producers. It is also a beneficial refresher for many others in the agriculture community.

Topics will include:
Corn and soybean diseases
Corn and soybean growth staging
Scouting for insect pests of corn and soybeans
Weed identification
Soil nutrients and their influence on crop growth

CCA & PAT Credits

Certified Crop Advisor and Pesticide Applicator Training Credits will be offered.

Pre-registration is required at https://katscropscoutingclinic2021.eventbrite.com
The REGISTRATION WINDOW opened April 19 at 8am and will close at 11:59 pm on May 18. This is necessary for us to adjust the logistics of the workshop, if needed, according to the attendance numbers. Registration cost is $105.

We must follow UK and local health department guidelines that are in place at the time of the workshops. We ask that you adhere to these recommendations, which may include wearing masks at times and social distancing, so we may continue to hold events. Also, due to social distancing protocol, we may be limited on transportation from once session to another (i.e. the field across the road to the building), in which you will be asked to drive yourself. The decline in Covid cases is very promising, however, this event is subject to cancellation, in which a full refund will be issued.

Transplanting Tips for Vibrant Gardens

Rick Durham, Extension Professor, Department of Horticulture

Last time, we talked about how growing your own vegetables and flowers from seed indoors or under a protective covering outside can expand your choices. You can find that information at https://bit.ly/3dgPP7h.

When the chance of frost has passed, it's time to think about transplanting your young plants to the garden. About two weeks before you do that, you should harden (toughen) them off to help them withstand the outside environment. To do so, begin reducing water and fertilizer (but don't let them dry out) and expose them to lower temperatures by taking your plants outside. Bring them in at night if the temperature is expected to drop into the 40s. Also expose them gradually to brighter and brighter light outside. Start off protecting them from strong midday sun and then over the course of a few days move them into full sun conditions.

Transplanting will temporarily check a plant's growth. Therefore, for successful transplanting, try to interrupt plant growth as little as possible. Follow these steps when transferring them to your garden:
1. Transplant on a shady day in late afternoon or in early evening to prevent wilting.
2. Soak transplants' roots thoroughly an hour or two before setting them in the garden.
3. Handle the plants carefully. Avoid disturbing the roots. It is better to grasp plants by their leaves than their tender stems.
4. Dig a hole large enough to hold the roots. For most plants, keep the soil depth similar to how they were previously growing. Tomatoes and peppers can be transplanted more deeply, since they develop roots on parts of the stem that is submerged in the soil. Press soil firmly around the roots.
5. Pour one cup of water around each plant and for a bonus start add some soluble fertilizer to the water (follow label directions).
6. Put more soil around each plant leaving a slight depression for water to collect.
7. Water the plants once or twice during their first week in the garden. If you didn't fertilize at planting, add fertilizer to the water at some point during the first week or so of growth. Follow fertilizer label directions for when to add additional fertilizer.
8. Watch your garden thrive.

For more information about starting plants for your flower or vegetable garden, contact the Marshall County office of the University of Kentucky Cooperative Extension Service.

Horticulture Webinar Wednesdays

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

May Classes

May 5 - Growing Great Tomatoes

May 12 - Japanese Art of Kokedama

May 19 - Growing and Caring for Begonias

May 26 - Summer and Fall Lawn Care

12:30 pm EST/11:30 a.m. CST

Register at this link:

https://tinyurl.com/UKYHortWebWed21

visit kentuckyhortnews.com

Making a Plan for Improved Hay Quality

Chris Teutsch, Forage Specialist

This winter at the Forages at the KCA Symposium, I presented a summary of ten years of hay testing results from the Kentucky Department of Agriculture's forage testing program. I would like to thank Kim Field from the KDA for allowing us to use this dataset and her long and faithful service to the forage and livestock industry in the Commonwealth. This sample set included more than 14,000 hay samples. The full presentation along with the other presentations given as part of this symposium can be viewed on the KYForages YouTube Channel. The results of this analysis showed that only 12% of the samples tested would meet the energy requirements of a lactating brood cow (Figure 1). As most of you know, body condition at calving is closely related to reproductive efficiency in cow-calf operations.

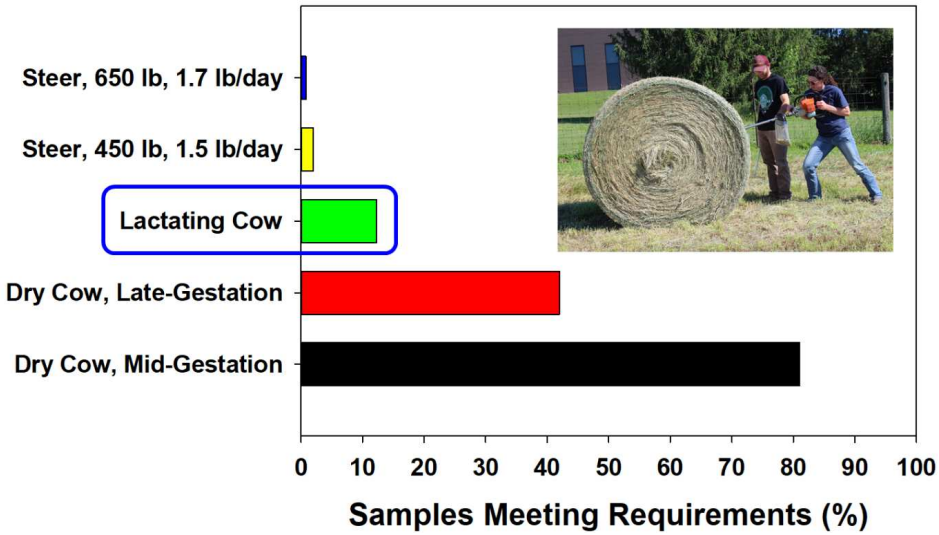


Figure 1. Proportion of hay samples tested at the Kentucky Department of Agriculture over a ten-year period (2007-17) that would meet the energy (total digestible nutrients) requirement of various classes of beef cattle. Only 12% of these samples would meet the energy requirements of a lactating brood cow.

Practical Considerations for Improving Hay Quality

I would like to challenge you to think about simple and practical ways to improve hay quality on your farm and then formulate a plan for implementing these practices. Below you will find a list of practical considerations for improving hay quality.

-Fertilize and lime according to soil test. A balanced fertility program is essential for optimizing hay production. Phosphorus, potassium, and lime should be applied according to soil test results. Avoid using "complete" fertilizers such as 19-19-19. In hay production, these fertilizers commonly over apply phosphorus and under apply potash. More information on soil sampling can be found in AGR-252, Soil Sampling Hayfields and Pastures.

-Apply nitrogen early to promote rapid spring growth. Applying 60-80 lb N/A in mid- to late March will promote early growth in hay meadows, resulting in higher first harvest yields.

-Harvest at the boot stage. The single most important factor impacting forage quality is stage of maturity at harvest. Hayfields should be mowed as soon as the grass reaches the boot-stage. By making the first cutting in a timely manner, we will have time to make a leafy second cutting just prior to the summer months.

-Mow early in the day. Some studies have shown that sugars are highest in late afternoon. However, in high rainfall environments like Kentucky, maximizing curing time is the highest priority. Therefore, hay should be mowed in mid to late morning after the dew has dried off.

Stage of Maturity	Crude Protein	Dry Matter Intake	Digestibility	Average Daily Gain
	%	lb/day	%	lb/day
Late boot	13.8	13.0	68	1.39
Early bloom	10.2	11.7	66	0.97
Seed forming	7.6	8.6	56	0.42

— Table 1. Impact of stage of maturity on the crude protein, dry matter intake, digestibility and average daily gain of stocker calves.

Making a Plan for Improved Quality Hay Continued:

- Use mower-conditioner. Conditioning the stems allows for moisture to escape at a faster rate. This shortens curing time and improves your chances of avoiding rain. Conditioning is especially important on first cutting grasses, summer annual grasses, and legumes, all of which tend to have larger stems.
· Set swath on mower-conditioner to the widest possible setting. Maximizing the swath width decreases curing or wilting time by exposing a larger portion of the forage to direct sunlight.
· Rake or ted at 40-50% moisture content. Raking and tedding the forage while it is still pliable reduces leaf loss and maintain forage quality. Once the moisture content is below 40%, leaf loss increases, especially in legumes such as alfalfa and clover.
· Bale at 18-20% moisture. Baling in this moisture range inhibits mold growth and reduces heating. Avoid baling hay that is excessively dry due to high levels of leaf loss and hay that is above 20% moisture due to heating and potential hay fires (unless a preservative is used).
· Store under cover and off the ground. Protecting hay from weathering helps to reduce dry matter losses and maintain forage quality. Much of the weathering damage is a result of the hay bale wicking moisture up from the ground. So, storing hay off the ground on a stone pad can greatly reduce deterioration.
· Do not cut hay fields too close. If not properly adjusted, disc mowers can cut very close to the soil surface and this can cause significant damage to cool-season grass stands. Do NOT mow perennial cool-season grass stands closer than 3-4 inches.
· Apply nitrogen following the first cutting. Following a timely first harvest, apply 50-60 lb N/A to stimulate regrowth. With adequate rainfall, a high quality second harvest can be made approximately 30 days after the first harvest.
· Allow hayfields to go into summer with some regrowth. Make sure to allow cool-season hayfields to go into summer with at least 5-6 inches of regrowth. This will shade the crown of the plant, moderating its temperature, reduce soil moisture losses, and reduce germination of annual weeds.
· Apply nitrogen in late summer. As the temperatures moderate in late summer and early fall, apply 60 lb N/A to stimulate fall growth. This growth can be grazed or harvested as needed.
· Allow plants time to replenish carbohydrates in the fall. Make sure and time fall hay cuttings to allow stand to regrow and replenish their carbohydrates prior to winter dormancy.
· Test hay and supplement accordingly. Testing hay provides the information needed to develop a supplementation strategy that will keep condition on cows and for marketing hay. For more information on hay testing see AGR-257 Hay Sampling: Strategies for Getting a Good Sample.
It is important to realize that the even the best made plans do not always work out as designed. Extended periods of rainfall that delay harvest, pop-up summer showers that soak an almost perfect hay crop, and equipment failures can all throw a wrench into a well-designed plan. The key to success is moving forward with a positive attitude that allows you to find your way around these roadblocks.

Forage Timely Tips

- Graze cover crops using temporary fencing.
- As pasture growth begins, rotate through pastures quickly to keep up with the fast growth of spring.
- Creep-graze calves and lambs, allowing them access to highest-quality pasture.
- Finish re-seeding winter feeding sites where soil disturbance and sod damage occurred.
- As pasture growth exceeds the needs of the livestock, remove some fields from the rotation and allow growth to accumulate for hay or haylage.
- Determine need for supplemental warm season forages such as pearl millet or sudangrass.
- Flash graze pastures newly seeded with clovers to manage competition.

Turnip Tater Mash

2 cups peeled, cubed raw turnip

1 cup peeled, cubed Yukon Gold potatoes

¼ cup minced onion

¼ teaspoon garlic salt

1 teaspoon butter

1½ teaspoons reduced fat sour cream

1. Wash, **peel** and **cube** turnips and potatoes. **Mince** onion.

2. Boil turnips, potatoes and onion until tender.

3. Drain and **mash** mixture with mixer or potato masher.

4. Add sour cream, butter and garlic salt. **Mix** well.

Yield: 6, ½ cup servings.

Nutrition Analysis: *50 calories, 1 g fat, 5 mg cholesterol, 75 mg sodium, 10 g carbohydrate, 2 g fiber, 3 g sugar, 2 g protein.*

Plate it up! Kentucky Proud

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

Kentucky Turnips

SEASON: Late spring and late fall.

NUTRITION FACTS: One half cup of turnips has only 20 calories and provides fiber and 25 percent of the vitamin C needed for a day.

SELECTION: Look for small turnips that are heavy for their size; they will be sweeter than large turnips. They should be firm and smooth, without scars or cracks.

STORAGE: Store in a cool, well-ventilated area or refrigerate for up to two weeks.

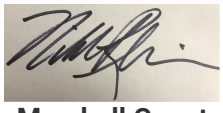
PREPARATION: Wash and peel. Turnips can be eaten raw or cooked.

To cook, slice or cube and cook in a small amount of water for 10-20 minutes. Turnips are excellent in soups and stews.

Source: www.fruitsandveggiesmatter.gov

TURNIP
Kentucky Proud Project
County Extension Agents for Family and Consumer Sciences
University of Kentucky, Nutrition and Food Science students
NOVEMBER 2011

For more information go to:
http://marshall.ca.uky.edu/AgNaturalResources
or follow us on Facebook @marshallcountyanr



Marshall County Agriculture and Natural Resources Agent