

NIKKI'S NEWSLETTER

Marshall County's Agriculture and Natural Resources Update

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

Welcome to 2022. Firstly, I want to take a moment to talk about the **Tornado**. I hope this newsletter finds all my clients safe and well. I have been blessed with the opportunity to help some of the farmers of Marshall County who were effected by the tornado. I have never felt so humbled in my life. It has been an honor requesting, organizing, and distributing donated items, researching and sharing grant opportunities, and organizing and dispatching clean up crews. Having seen the outpouring of generosity through this relief effort so far, I have a new sense of faith in humanity and, as always, am proud to be a part of this community.

As you have probably seen, the new Grain Crops Center of Excellence in Princeton (formerly called the UKREC), which underwent a major renovation in 2019, was basically a total loss to the tornado (pictured below.) The most immediate effect you will see is in the **soils lab**. It's gone! Therefore, until the rebuild is complete, all the samples in the state will be run through the Lexington lab. I would highly recommend bringing your soil samples in sooner rather than later. There will likely be a slight delay due to shipping time and the increased number of samples running through that lab. Please note that taking your samples a little early this year will not make a significant difference in your results. Also, with fertilizer prices the way they are, you need an unbiased, reliable soil test recommendation more than ever this year.



Even though the center will need a complete rebuild, that hasn't stopped us from finding ways to host the programs you all desire. Here are some upcoming **UKREC programs**. Call the Extension office at 270-527-3285 for more details on these great opportunities:

- January 27 KATS - Approaches to Dealing with High Fertilizer Prices (Caldwell Office)
- February 8 Winter Wheat Meeting (Hopkinsville)
- March 9 IPM Training School (Christian County or virtually)
- May 10 Wheat Field Day
- June 30 Pest Management Field Day
- July 21 or 26 Corn, Soybean & Tobacco Field Day

Also, I want to take a second to congratulate the **Watt family/J&K farms** for winning the 1st Division of the 2021 Kentucky Yield Contest with a 261.98 bushel no-till yellow corn entry! Congrats guys!

Don't forget about these great upcoming events with **Free Food! RSVP today!**
Winter Ag Conf., Grain Farmer Meeting with Breakfast and Lunch Provided- Feb. 3rd (page 8)
Raising The Steaks, Beef Producer Dinner- March 3rd
Grain Grower's Night Out, Grain Farmer Dinner- March 24th

See you there! -Nikki

IN THIS ISSUE:

GENERAL

- P.2 WINTER PROGRAM LINEUP
- P.3 PRIVATE APPLICATOR TRAININGS
- P. 6 SMALL DIVERSIFIED FARM SERIES

GRAIN

- p. 4-5 CONSIDERATIONS FOR BURNDOWN WITH HERBICIDE SHORTAGES
- P.7 ADULT FARMER CROP PRODUCTION SERIES
- P.8 WINTER AG. CONFERENCE

LIVESTOCK

- P.9 HEIFER DEVELOPMENT WORKSHOP

HOME HORT.

- P.3 LUNCH BREAK GARDENING SERIES

RECIPE OF THE MONTH

- P.10 NOODLES FLORENTINE

2022 Winter Program Lineup

Save The Date

Small Diversified Farm Series

Next Meeting on January 27th

Adult Farmer Grain Series

Monday Night's through Feb. 28th

Winter Ag. Conference (Grain)

February 3rd

JR. Master Gardener

Restarts February 1st (Every other week)

Lunch Break Gardening Series

Every 1st Wednesday (RSVP)

Clark's River Beekeeping Meetings

Every 2nd Tuesday Night

Private Applicator Trainings

January 26th

February 23rd

March 23rd

Raising The Steaks Beef Dinner

March 3rd (RSVP)

Grain Grower's Night Out

March 24th (RSVP)

For more information or to RSVP contact:

Marshall County Extension Office

(270) 527- 3285

1933 Mayfield Highway

Benton KY, 42025

Follow us on



@MarshallCountyExtensionANR



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

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital 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



 Disabilities
accommodated
with prior notice

Private Applicator Trainings 2022



**University of
Kentucky**
College of Agriculture,
Food and Environment

January 26th 8:30AM
February 23rd 8:30AM
March 23rd 8:30AM

Marshall County Extension Office
1933 Mayfield Highway
Benton KY, 42025

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

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital 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



Disabilities
accommodated
with prior notification

Lunch Break Gardening Series

**University of
Kentucky**
College of Agriculture,
Food and Environment

February's Topic: Cold Frames & Hot Boxes



Learn how to construct and use a cold frame/hot box!

*Join us during your
lunch break for a
gardening workshop!*

\$10

*Includes a boxed lunch
from Cafe' Ce'le'bre'*

*1st Wednesday Monthly
12:15-12:45pm
at the Marshall County
Extension Office*



*RSVP by Jan. 31st
Call 270-527-3285*

Considerations for Spring Burndown Strategies when Herbicides are in Short Supply

Dr. Travis Legleiter and Dr. J.D. Green, Extension Assoc.

Note: This article represents the combined thinking of weed scientists from Indiana, Kentucky, Michigan, Ohio, and Pennsylvania. There is a lot of speculation about herbicide shortages for the 2022 growing season, and some products are apparently getting more expensive and/or scarce now. This will affect herbicide buying and weed management decisions for the 2022 season. The two main active ingredients that we are hearing about right now are glyphosate (Roundup, others) and glufosinate (Liberty, others), for which prices have increased substantially. There will likely be limited supplies of other pesticide active ingredients as well, but in the short term, a shortage of these two active ingredients poses some major challenges for corn and soybean production. The purpose of this article is to discuss ways to minimize the impact of herbicide shortages, primarily glyphosate, on corn and soybean production. As you search for alternatives to these two herbicides and others, the weed control guides and technical guides produced by University Extension and industry are an important tool for planning weed management pro-grams and herbicide purchases. Copies of AGR-6, "Chemical Control of Weeds in Kentucky Grain Crops," are available at the Marshall County Extension Office.

Some guiding principles:

The following are based on our experience that may help with decisions, especially where glyphosate will not be in all applications:

1. Spring tillage can be an option to replace herbicide burndown. Although, this can cause long-term compaction problems if tilled when too wet. Waiting until weeds are large makes tillage less effective. Weeds that survive tillage will be difficult to control with POST herbicides.
2. Where it's only possible to use glyphosate once, it may be needed most in the burndown. Saflufenacil (Sharpen) can be added for enhanced control of rye and ryegrass, and marestail. ACCase herbicides (e.g. clethodim (Select, etc.), quizalofop (Assure II)) can be then used for POST grass control in soybeans. Glufosinate (Liberty, etc.), Enlist Duo, or XtendiMax/Engenia can be used for many broadleaf weeds, especially the glyphosate-resistant ones. Where residual herbicides are omitted, or do not provide enough control, we would expect POST treatments to struggle more in the absence of glyphosate with weeds such as lambsquarters (So use residuals). Glyphosate is still more than just a grass herbicide.
3. If glyphosate is omitted from burndown, grasses become a bigger issue than broadleaf weeds. Options for annual grasses: Gramoxone; rimsulfuron (Resolve Q, Realm Q, etc) – when small (corn only); ACCase herbicides – clethodim (wait 7 days to plant corn), quizalofop (soybeans only) – need 60 degree days, apply alone if possible, weak on winter annuals under cold conditions. Where trying to reduce glyphosate rates, a rate of 0.38 lb ae/A will control most annual grasses.
4. Burndown programs typically contain two to three "burndown" herbicides in order to ensure control of a diversity of weeds under various environmental conditions. This is why glyphosate is not used alone in burndown programs, but mixed with 2,4-D, dicamba, or Sharpen. We suggest following this same strategy when glyphosate is omitted – try to have at least two herbicides with substantial burndown activity in the mix. Increasing rates of components of the burndown mix should be generally helpful, in accordance with label guidelines for soil type, weed size, time until planting, etc. There are also other herbicides that can improve control in some mixes although we don't consider them "burndown" herbicides on their own – chlorimuron, atrazine, metribuzin.
5. There are generally more options for burndown and POST applications in corn compared with soybeans, so it might make sense to save a limited supply of glyphosate and glufosinate for use in soybeans.
6. Control of little barley and annual (Italian) ryegrass in a burndown requires glyphosate; ACCase herbicides are not good enough in spring. For annual bluegrass – ACCase can work - 60 degree day, no tank mixes. High rates of metribuzin can provide fair control of bluegrass.
7. For burndown of a legume cover prior to corn, clopyralid and dicamba are the most effective herbicides. For cereal rye, Gramoxone plus atrazine or metribuzin may be best option in the absence of glyphosate.
8. In some situations it may be possible to cut a cover crop for haylage or silage, then use glyphosate POST to kill regrowth. The addition of an ACCase herbicide may help control regrowth in soybeans. POST corn herbicides will not kill the rye, including nicosulfuron, rimsulfuron, and Group 27 herbicides (Impact, Shieldex, Laudis etc).

9. Mixing ACCase herbicides with dicamba or 2,4-D (no glyphosate) can cause reduction in grass control due to antagonism. Apply separately to avoid this.

10. Increasing the number of applications can help with weed and herbicide management when certain products are short or glyphosate rates need to be reduced. For example, three applications instead of two: 1) Fall or early spring burndown when weeds are small; 2) residuals plus possibly additional low-rate burndown at planting; 3) apply POST treatments.

11. Best opportunity to omit glyphosate or reduce the rate will be: 1) in fields treated the previous fall, or those with a low population of small weeds; and 2) where the POST program is comprehensive enough to control weeds that escape the burndown – Enlist, XtendiFlex, LL GT27 (their effectiveness also depends upon whether glyphosate is being used POST).

12. Take all necessary steps to maximize herbicide activity - optimize adjuvants and sprayer set up (nozzles, volume, pressure, speed) per label guidelines.

13. Check on availability of premix herbicides that may contain glyphosate or another herbicide that is unavailable as a single ingredient product. Examples that contain glyphosate – Sequence, Expert, Halex GT, Acuron GT, Extreme, Flexstar GT.

Burndown programs that deemphasize use of glyphosate – pros and cons.

Can be used in corn and soybeans:

Gramoxone (paraquat) + 2,4-D + metribuzin/atrazine (atrazine – corn only)

Strengths: best non-glyphosate option for rye burndown; adequate for general spring weeds including marestail <6" tall; can be applied before either corn or soybeans (depending on rate); has activity on grasses

Weakness: perennial weeds; large marestail; annual ryegrass; special training required to apply paraquat

Comments: Metribuzin rate for corn varies by soil type and is limited to a maximum of 5.33 oz of 75DF.

Sharpen + glyphosate (low rate 0.38 - 0.56 lb ae/A) + 2,4-D

Strengths: adequate cereal rye and other cover crop burndown; marestail control; can be applied before either corn or soybeans (depending on rate)

Weakness: large weeds; overall weed control is fair due to low glyphosate rate

Comments: Rates higher than 1 oz require wait of 15 to 30 days to plant soybeans. Must wait 2 weeks to plant soybeans if 1 oz is mixed with flumioxazin or sulfentrazone product.

Sharpen + 2,4-D + metribuzin/atrazine (atrazine – corn only)

Strengths: good foliar and residual marestail control; good initial Palmer/waterhemp control; burndown and re-sidual in one pass

Weakness: does not control grasses (atrazine control grass up to an inch when applied with oil); must wait 2 weeks to plant soybeans if mixed with flumioxazin or sulfentrazone product. Metribuzin rate for corn varies by soil type and is limited to a maximum of 5.33 oz of 75DF.

Leadoff/Crusher/other rimsulfuron products + 2,4-D + metribuzin/atrazine

Comments: some grass control; limited burndown activity on several key species; better used in corn due to long wait to plant soybeans (15 to 60 days)

Harmony Extra/similar products + 2,4-D + metribuzin

Comments: average (70-80%) control on many key broadleaves; no grass control; additional residuals and POST products necessary for in crop weed control; can be used in corn or soybean

Corn only:

Acuron/Lexar/generic equivalents/Resicore + atrazine

Strengths: winter and summer annuals; burndown and residual in one-pass; can add more atrazine or 2,4-D

Weakness: poor control of cereal rye and ryegrass; corn only

Soybeans only:

2,4-D + metribuzin + clethodim

Strengths: some grass suppression including cereal rye and ryegrass;

Weakness: 2,4-D antagonizes clethodim activity; cool weather limits clethodim activity; use rate of clethodim is not high enough if used before corn planting

Metribuzin + 2,4-D + chlorimuron product

Comments: good fit in fields that were treated prior fall; Some chlorimuron products contain metribuzin – suggest supplementing with additional metribuzin so total is the equivalent of 6 to 12 oz 75DF. Does not control grasses. Canopy EX/Cloak EX contains tribenuron, which improves control of chickweed.

SMALL DIVERSIFIED FARM SERIES

HOMESTEADING FOR PROFIT



College of Agriculture,
Food and Environment
Cooperative Extension Service

FARM AGENCIES

GRAND RIVERS COMMUNITY CENTER
155 W CUMBERLAND AVE
GRAND RIVERS, KY

JANUARY 27, 2022
6 PM

Knowing what farm agency to turn to for financial, business planning and government reporting is an important step in establishing a farm business. Speakers will include representatives from Farm Service Agency, Natural Resources Conservation, KY Center for Ag and Rural Development, Ky Office of Ag Policy

CALL YOUR COUNTY EXTENSION OFFICE TO REGISTER:

CALDWELL: 270-365-2787

CALLOWAY: 270-753-1452

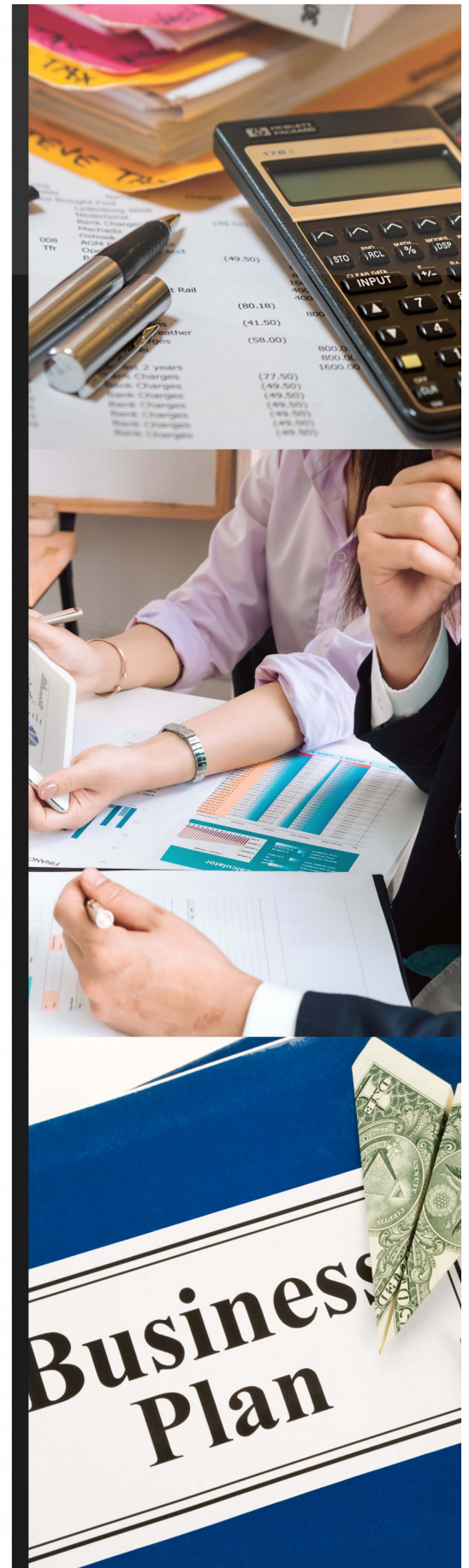
CRITTENDEN: 270-965-5236

LIVINGSTON: 270-928-2168

MARSHALL: 270-527-3285

MCCRACKEN: 270-554-9520

TRIGG: 270-522-3269



Adult Farmer Crop Production Series

 University of
Kentucky
College of Agriculture,
Food and Environment



A Collaborative effort between Jeff Futrell, Young Farmer Educator and Nikki Rhein, Extension Agent, to provide the grain farmers of Marshall County with timely talks on grain production topics.

Schedule:

Jan. 10th Fertilizer and Chemical Issues with Todd Gresham, Nutrien

Jan. 17th Agronomic Issues of Crops with Jessie Little, Pioneer Seed

Jan. 24th 2022 Crop Budget Outlook with Jeff Futrell, Young Farmer Ed.

Jan. 31st Grain Market Outlook with Walt Curry, ADM

Feb. 7th TBA

Feb. 14th Timely Weed Topics with Travis Legleiter, UK

Feb. 21st TBA

Feb. 28th How Far to Push Your Soil Fertility Bank with Edwin Ritchey, UK

Begins at 7:00pm
Marshall County Extension Office
1933 Mayfield Hwy., Benton, KY 42025

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

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital 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



Disabilities
accommodated
with prior notification

2022 WINTER AG CONFERENCE

FEB 3RD - LOWRY FARMS

Address: 5183 KY-94, Water Valley, KY 42085

7:30AM: REGISTRATION

8:00AM: JOHN GROVE, SUCESS DURING HIGH INPUT PRICES

9:00AM: FSA TORNADO RELIEF PROGRAM UPDATE

9:30AM: CHAD LEE, UKREC UPDATE

10:00AM: JAMIE GUFFEY, POULTRY UPDATE

10:30AM: RURAL ELECTRIC PROGRAM UPDATES

10:45AM: JOSH MCGRATH, MITIGATING NITROGEN PRICES

12:00PM: LUNCH/DOOR PRIZES



CALL YOUR COUNTY
OFFICE TO REGISTER:

CARLISLE: 270.365.2787

CALLOWAY: 270.753.1452

GRAVES: 270.965.5236

FULTON: 270.928.2168

MARSHALL: 270.527.3285

MCCRACKEN: 270.554.9520

HICKMAN: 270.653.2231



College of Agriculture,
Food and Environment
Cooperative Extension Service

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

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital 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



Disabilities
accommodated
with prior notification.

Calloway County Cattlemen's 2022 Heifer Workshop



March 3rd 2022

- Heifer Development-
- Evaluating Heifer's for Structure-
- Tailhead Bleeding Demo.-
- Pelvic Measurement Demo.-
- Chute-Side Evaluations-
- Live Cattle & Hands on Event-

To register please contact the
 Calloway County Extension Office:
 270-753-1452

Location: MSU Expo Center- College
 Farm Rd.- Murray, KY
 Date: March 3rd, 2022
 Time: 6:00pm (Dinner Provided)

Thank you to our sponsors:



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

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

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital 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





Noodles Florentine

8 ounces whole wheat egg noodles
3 tablespoons butter
4 tablespoons whole wheat flour

¼ teaspoon pepper
2 cups fat-free milk
2 cups low-fat cheddar cheese

1½ cups diced, low sodium cooked ham
10 ounces fresh spinach, cooked and drained
¼ cup bread crumbs

Preheat oven to 350 degrees F. **Cook** noodles according to package directions; **drain**. In a small saucepan, **melt** butter over medium heat. **Add** flour and pepper; **blend** to a smooth paste. Gradually **add** milk, stirring constantly and **cook** until thickened. **Add** cheese, **stirring** constantly, until melted. **Place** half of the noodles in a greased 2 quart, shallow baking dish. Over the noodles, **sprinkle** a layer of ham and spinach.

Drizzle half of the cheese sauce over the mixture. **Repeat** with second layer of noodles, ham, spinach and remaining cheese sauce. **Sprinkle** with bread crumbs. **Bake** for 25 minutes.

Yield: 8, 1½ cup servings

Nutritional Analysis: 310 calories, 11 g fat, 5 g saturated fat, 45 mg cholesterol, 680 mg sodium, 29 g carbohydrate, 3 g fiber, 4 g sugar, 23 g protein.

Kentucky Spinach

SEASON: May to June and September to November.

NUTRITION FACTS: One cup serving of raw spinach has 10 calories. Packed with vitamins that promote health, it is a major source of vitamins A and C. It is also a good source of calcium.

SELECTION: Look for bright green leaves that are fresh, young, moist and tender. Avoid coarse stems and injured, torn, dried, limp or yellowed leaves.

STORAGE: Store in the coldest part of the refrigerator for no more than two to three days.

PREPARATION: Wash in lukewarm water in a large bowl. Remove any roots, rough ribs and the center stalk, if it is large or fibrous.

Source: www.fruitsandveggiesmatter.gov

PRESERVING: Wash leaves and remove large stems. Blanch 2 minutes, cool, drain and pack in canning or freezer jars or plastic freezer boxes, leaving ½-inch headspace. Seal, label and store up to one year in the freezer.

KENTUCKY SPINACH

Kentucky Proud Project

County Extension Agents for Family and Consumer Sciences

University of Kentucky, Dietetics and Human Nutrition students

September 2015

Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin. For more information, contact your county's Extension agent for Family and Consumer Sciences or visit www.uky.ag/fcs

COOPERATIVE
EXTENSION
SERVICE

UK
UNIVERSITY OF
KENTUCKY
College of Agriculture,
Food and Environment

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

Nikki Rhein

Marshall County
Agriculture and Natural
Resources Agent