



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

Cooperative Extension Service

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A monthly newsletter on Extension Service programs and events.

Extension News —

Agriculture - Family & Consumer Sciences - 4-H Youth Development



In this Issue —

- *Family & Consumer Sciences Program Highlights—Kids in the Kitchen; Laugh & Learn Playdate*
- *Food Preservation Workshop*
- *Homemaker Council Meeting*
- *Drop It Like It's Hot Reminder*
- *4-H Camp Photos*
- *The Great Outdoors With Youth; Cost of Living Across KY*
- *Managing Pastures During Dry Times*



Join the Lee County Extension Service for a FREE Food Preservation Workshop!!
July 17, 2023 - 10 am — 3 pm
Call Extension Office to Register

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

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LEXINGTON, KY 40546



Disabilities accommodated with prior notification.

Family and Consumer Science Program Highlights



Kids in the Kitchen

A partnership between the Diabetes Coalition, Health Department, and the Extension Office helps a cooking camp where kids learned a variety of new skills such as, measuring, myplate, knife skills, food safety, and more.



Laugh & Learn Playdate

Join our 12-month Laugh and Learn program that targets school readiness. Each month offers learning activities that are relevant to children's development and will coincide to help celebrate holidays or seasonal festivities. Lessons include a healthy snack, book, craft, music activity, fine motor and large motor activities and free play. *All children must be accompanied by an adult.

DATE: JULY 20TH **TIME:** 3:30 P.M.

FOR:
AGES 5 & UNDER

FCS Updates

Call to make an appointment

Canner gauge testing today!
Just bring in the canner lid!

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Reminders

**DROP IT
LIKE IT'S
HOT**

Don't forget to come weigh in and bring back your exercise tracker.

Upcoming Dates

- *Weigh in: First week of July
- *Homemaker Council Meeting @10 7-6-23
- *Food Preservation @10-3pm 6-17-23
- *Laugh & Learn: @3:30 6-20-23
- *Diabetes Support Group @6 6-25-23

HOMEMAKER COUNCIL MEETING

We will be discussing upcoming programs, planning the Area Meeting, reports, and a program year recap.

Date: July 6th Time: 10 A.M.



Location: Lee County Extension Office

Date: July 17th Time: 10-3

Join us in learning about different hands on practices for preserving food. If you are interested in the class, please register by giving us a call at 606-464-2759.

Food Preservation

Laken Campbell, CEA for Family & Consumer Sciences Education

MoneyWise Newsletter view link - https://fcs-hes.ca.uky.edu/files/moneywise_july_2023.pdf



4-H CAMP

May 30th-June 2nd 2023



Cali soaking up some sun while fishing.



Watching gaga ball



Mercedes enjoying messy games.



MESSY GAMES

SHARE THE BENEFITS OF THE GREAT OUTDOORS WITH YOUTH

SOURCE: ASHLEY OSBORNE, 4-H YOUTH DEVELOPMENT SPECIALIST

SUMMER AND WARMER WEATHER ARE JUST AROUND THE CORNER. NOW IS THE TIME TO START GETTING YOUNG PEOPLE OUTDOORS AND LETTING THEM EXPERIENCE MOTHER NATURE.

YOUTH CAN RECEIVE NUMEROUS BENEFITS FROM GETTING OUTDOORS AND INTO NATURE. SUNLIGHT EXPOSURE CAN HELP REDUCE NEARSIGHTEDNESS AND INCREASE VITAMIN D LEVELS. PLAYING OUTDOORS ALSO INCREASES PHYSICAL ACTIVITY WHICH HELPS REDUCE THEIR RISK FOR BECOMING OVERWEIGHT OR OBESE.

EXPLORING NATURE CAN ALSO HELP YOUNG PEOPLE IMPROVE THEIR RELATIONSHIP SKILLS AND REDUCE STRESS, ANGER AND AGGRESSION. RESEARCH HAS SHOWN THAT YOUTH WHO REGULARLY INTERACT WITH THEIR NATURAL ENVIRONMENT ARE BETTER COMMUNICATORS, BETTER COOPERATORS AND MISBEHAVE LESS THAN THEIR PEERS. LEARNING IN NATURE REQUIRES YOUNG PEOPLE TO PAY ATTENTION TO THE ENVIRONMENT AROUND THEM. THIS UNIQUE TEACHING METHOD HELPS YOUTH FOCUS BETTER ONCE THEY RETURN TO THE CLASSROOM. NATURE ALSO PROMOTES A HANDS-ON LEARNING ENVIRONMENT, WHICH CAN LEAD TO IMPROVED ACADEMICS.

YOU CAN ENCOURAGE YOUTH TO SPEND MORE TIME OUTDOORS IN MANY DIFFERENT WAYS. HERE ARE SOME IDEAS:

PLANT A GARDEN FILLED WITH ALL KINDS OF DIFFERENT VEGETABLES OR FLOWERS.

MAKE IT EDUCATIONAL. TEACH YOUR CHILD ABOUT DIFFERENT TREES, PLANTS AND BUGS THAT LIVE IN YOUR YARD.

WEATHER PERMITTING, SET ASIDE A TIME AFTER SCHOOL EACH DAY FOR OUTDOOR PLAYTIME AND EXPLORATION.

TAKE A WALK OR A HIKE. MANY KENTUCKY COMMUNITIES HAVE INCREASED THEIR WALKABILITY AND THEIR BUILT ENVIRONMENT. TAKE ADVANTAGE OF LOCAL TRAILS OR, ON THE WEEKENDS, GO EXPLORE ONE OF THE NUMEROUS BEAUTIFUL TRAILS FOUND IN THE STATE'S PARKS, NATURE PRESERVES AND ARBORETUMS.

IN KENTUCKY 4-H, OUR PROGRAMMING ALLOWS US TO GET YOUTH OUTSIDE THROUGH A VARIETY OF WAYS. MANY OF OUR COUNTIES HAVE OUTDOOR CLUBS THAT EXPLORE LOCAL ENVIRONMENTS. MANY OF OUR PROJECTS ENCOURAGE YOUTH TO GET OUTDOORS AND PAY ATTENTION TO AND COLLECT INFORMATION FROM THEIR NATURAL ENVIRONMENT. WE ALSO HOST THE EVER-POPULAR SUMMER CAMPS.



HOW TO COMBAT RISING COSTS OF LIVING ACROSS KENTUCKY



KENTUCKIANS ARE FEELING THE WEIGHT OF RISING LIVING EXPENSES. WITH NATIONAL INFLATION AT 7.5%, PRICES FOR GOODS AND SERVICES ARE AT RECORD HIGHS. THESE STEEP COSTS HAVE FORCED MANY HOUSEHOLDS TO CONSIDER WAYS TO BETTER MANAGE THEIR RESOURCES.



TO COMBAT RISING LIVING EXPENSES, START BY FINDING INTENTIONAL WAYS TO MANAGE YOUR RESOURCES, REDUCE EXPENSES AND STRETCH YOUR INCOME. BELOW ARE A FEW WAYS TO HELP YOUR BUDGET ABSORB THE ILL EFFECTS OF INFLATION.



AN INEXPENSIVE WAY TO REDUCE HEATING AND COOLING BILLS IS TO CHECK FOR INSULATION LEAKS AROUND YOUR HOME. SIMPLE REPAIRS, SUCH AS PURCHASING A BOTTLE OF EXPANDING FOAM FOR UNDER \$10, CAN HELP IF YOU HAVE CRACKS AROUND WINDOWS OR FOUNDATIONS. STICK-ON FOAM STRIPS TO PLACE UNDER YOUR DOORS OR ALONG VERTICAL OPENINGS ALSO SELL FOR LESS THAN \$10.



SETTING YOUR THERMOSTAT AT 68 DEGREES OR BELOW IN THE WINTER, OR 78 DEGREES OR ABOVE IN THE SUMMER, CAN REDUCE YOUR ANNUAL HEATING AND COOLING COSTS BY AS MUCH AS 10%. REMEMBER TO REGULARLY CLEAN OR CHANGE YOUR AIR FILTERS TO KEEP YOUR HVAC SYSTEM EFFICIENTLY WORKING.



FREE GAS STATION APPS OR WEBSITES TRACK THE BEST LOCAL PRICES ON GASOLINE. IF YOUR VEHICLE CAN OPERATE ON REGULAR GAS, CHOOSE THAT OVER MID-GRADE OR PREMIUM FUEL OPTIONS. YOU ARE LIKELY TO FIND BETTER DEALS AT STATIONS AWAY FROM MAJOR HIGHWAYS OR INTERSECTIONS. TRAVELING BETWEEN 65 AND 75 MPH ON HIGHWAYS CAN SAVE 10% TO 20% ON FUEL COSTS. KEEPING YOUR CAR'S MAINTENANCE CURRENT CAN HELP TO KEEP IT RUNNING AT OPTIMAL CAPACITY. CHECK YOUR TIRE PRESSURE AND LOOK FOR OPPORTUNITIES TO BATCH ERRANDS. CARPOOL, TAKE PUBLIC TRANSPORTATION OR WALK WHEN POSSIBLE.



TRACK SALES AT YOUR LOCAL GROCERY STORES AND STOCK UP ON PANTRY AND FREEZER STAPLES WHEN ITEMS ARE ON SALE AND IN STOCK. SHELF-STABLE ITEMS SUCH AS CANNED VEGETABLES, LEGUMES AND GRAINS CAN ADD VOLUME TO YOUR MEALS FOR LESS MONEY. FREEZE PRODUCE, MEATS OR SOME CHEESES WHEN YOU FIND THEM ON SALE. MEAL PLAN BEFORE YOU GO SHOPPING AND SELECT RECIPES THAT WILL YIELD LEFTOVERS OR THAT CAN BE REPURPOSED IN MULTIPLE MEALS.



BE FLEXIBLE WHEN YOU SHOP FOR AND PREPARE MEALS. SELECT STORE-BRAND PRODUCTS TO SAVE MONEY. EXPLORE ADDING MEAT- OR DAIRY-FREE RECIPES TO YOUR MENU TO CUT COSTS ON HIGHER-PRICED INGREDIENTS. WHEN YOU LOOK FOR SMALL WAYS TO SAVE MONEY ON EVERYDAY ESSENTIALS, YOU CAN STRETCH YOUR DOLLARS.

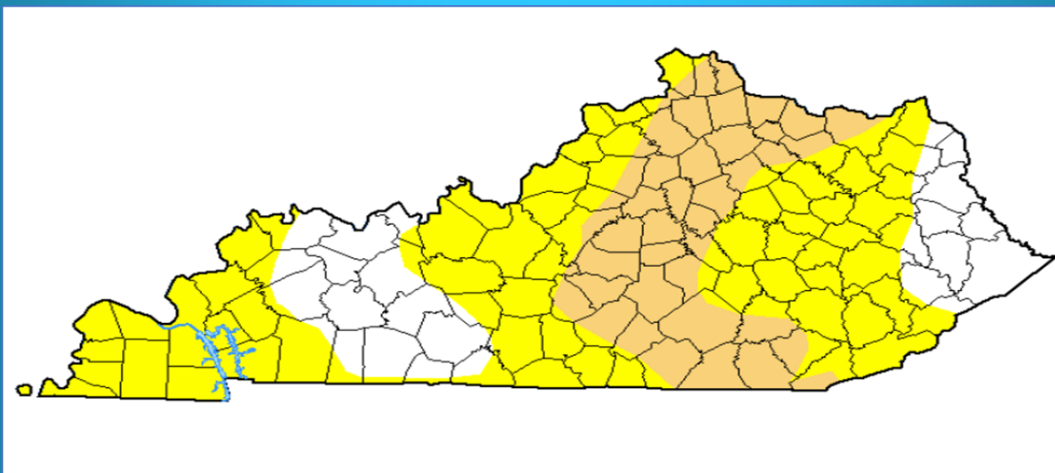
SOURCE: NICHOLE HUFF, PH.D., ASSISTANT EXTENSION PROFESSOR, FAMILY FINANCE AND RESOURCE MANAGEMENT



Managing Pastures During Dry Times —

Chris D. Teutsch, UK Research and Education Center at Princeton

My farm old manager at the Virginia Tech's Southern Piedmont Ag Research station used to say that "the difference between a flood and drought is about two weeks. Truer words have never been spoken. In most summers we find ourselves teetering on the edge of drought multiple times and how we manage pastures prior to drought can have a profound impact on how quickly pastures recover after rain finally comes. Currently, significant areas within the Commonwealth are abnormally dry or under moderate drought conditions.



More than 80% of the Commonwealth is abnormally dry (yellow) or under moderate drought (brown) stress.

Developing and implementing a drought management plan will reduce the economic and emotional impact of drought on your operation and significantly speed up recovery of drought stressed pastures. The time to develop and implement this plan is before it get dry. The strategies that are used will depend on the resources you have on your farm and your

pastures. The time to develop and implement this plan is before it gets dry. The strategies that are used will depend on the resources you have on your farm and your long-term goals. The remainder of this article will outline some strategies that could be used either alone or most effectively in a combination.

Ensure that livestock have access to adequate amounts of clean water.

Water is the most important nutrient for livestock. During drought, the water requirement of all livestock increases due to higher temperatures and the consumption of dry forage material and hay. In addition, naturally occurring water sources such as ponds, streams, springs, and seeps often have limited flow. So, it is important to make sure that livestock have unfettered access to clean water.

Livestock Species	Water Requirement at 50°F	Water Requirement at 90 °F
	gallons/head/day	
Calf, beef, 400 lb	4	10
Feeder, beef, 1000 lb	8	17
Cow, beef	8	20
Cow, dairy	15	30
Heifer, dairy	6	15
Sheep and goats	1.5	3.5
Horses and mules	8	12

Water requirements of various livestock species and classes at 50 and 90 degrees F. Adapted from Southern Forages, Fifth Edition

Soil test and adjust fertility. Maintaining soil test levels in the medium and high range and soil pH in the range of 6.0 to 6.4, will optimize the growth of pastures and hayfields prior to and during conditions. Maintaining proper soil fertility removes a stress from pastures, allowing them to better cope with dry conditions.

Set a sustainable stocking rate. Having a perpetually light stocking rate that underutilizes pastures in most years but gets you through drought years is a viable drought management strategy. However, this strategy requires that you have a lot of land area and will tend to reduce profit per acre. In most cases this probably is not the best long-term drought management strategy. There is no better way to lose money than under or overstocking your pastures. The best approach is to set a sustainable stocking rate and focus on other drought management strategies. In Kentucky and neighboring states, a sustainable stocking rate will be 2 to 3 acres per cow-calf unit.

Implement rotational grazing. Although this does not sound like much of a drought management strategy, the first thing that people notice when they switch from a continuous to rotational grazing system is that pastures grow longer into a drought and recover faster after the rain finally comes. The reason for this is that rotationally grazed plants have larger and healthier root systems that can go deeper into the soil for water. In addition to a larger and healthier root system, not grazing closer than 4-5 inches modifies the microclimate (conditions) near the soil surface, keeping the plants growing point (crown) cooler and reducing evaporation of water from the soil surface. Good grazing management is not just a drought management strategy, but probably one the best ones.



Incorporate warm-season perennial grasses into grazing system. During the summer months, warm-season grasses will produce about twice as much dry matter per unit of water used when compared to cool-season grasses. There are several perennial warm-season grasses that can be used, but in western Kentucky the most productive, persistent, and tolerant to close and frequent grazing is bermudagrass. Bermudagrass requires management to be productive, which means it needs to be grazed frequently to keep it vegetative and it needs nitrogen. Other perennial warm-season grasses include the native grasses such as big and little bluestem, Indiangrass, switchgrass, and eastern gamagrass. These grasses can be productive parts of grazing systems, but will require a higher level of grazing management to persist. The last perennial warm-season grass that I want to mention is johnsongrass. I am going on record to make clear that I am NOT encouraging anyone to plant johnsongrass, but sometimes it just shows

View this link for the Kentucky Beef Book—
<http://www2.ca.uky.edu/agcomm/pubs/ID/ID108/ID108.pdf>

up. Johnsongrass occurs on many farms in Kentucky and could provide high quality summer grazing when managed. Because johnsongrass is extremely palatable, it needs to be managed under rotational stocking to persist. Otherwise it will be selectively grazed and eventually grazed out of the pasture.



Weaned calves grazing a brown midrib sorghum-sudangrass at the UK Research and Education Center at Princeton.

Incorporate warm-season annual grasses into grazing system. Warm-season annual grasses like pearl millet, sorghum-sudangrass, sudangrass, and crabgrass can provide high quality summer grazing. The primary disadvantage with summer annual grasses is that they need to be reestablished every year, which costs money and provides the chance for stand failure. The exception to this is crabgrass that develops volunteer stands from seed in the soil. Although most people don't realize (or want to admit it) crabgrass has saved many cows during dry summers in Kentucky. Research has shown that crabgrass responds well to improved management and can produce 2-4 tons per acre of highly digestible forage. The best use of annuals in grazing systems is as a transition crop when pastures are being renovated.

[View this link for the publication on Home Vegetable Gardening in Kentucky—ID 128 —](http://www2.ca.uky.edu/agcomm/pubs/id/id128/id128.pdf)
<http://www2.ca.uky.edu/agcomm/pubs/id/id128/id128.pdf>

Irrigate pastures. Irrigating your pastures can increase dry matter production by about 50% in a normal year and much more than that in a dry year. The best grass to irrigate is warm-season perennial and annual grasses such as bermudagrass and sorghum-sudangrass. One common misconception is that irrigating a cool-season grass will make it grow in the summer. Cool-season grass growth is limited by not only moisture, but also temperature. Once temperatures exceed 70 F, cool-season grass growth greatly slows and even stops when nighttime temperatures remain above 80 F. In contrast, warm-season grasses do not even reach peak growth until 90 F.

Feed hay. The most efficient way to harvest forage is with the animal. In Kentucky we should strive to reduce hay feeding in our grazing systems. This doesn't mean that we will not ever need hay. Drought is certainly one of those cases that hay will likely be required. A common problem with the hay feeding strategy is that when you need it, everybody needs it and there is little to go around. In addition, the price of hay during a drought can be high. One thing to think about is buying hay when it is plentiful and the prices are low and storing it under cover. It is kind of like having money in the bank. Hay that was well cured will keep for years if it is kept off the ground and out of the weather.

A key to successfully using hay as part of managing drought stress is to start to feed it before pastures have been overgrazed. If you work through your rotation and the rested pastures have NOT regrown, it is time to feed hay. Your neighbors will look at you like you are crazy because you still have some grass, but what they don't understand is that you are managing for rapid recovery when it does rain. Hay feeding should be done in one paddock so that damage from overgrazing is confined to this area.

Utilize commodities to extend pastures. Commodities such as brewer's grain, corn gluten, and soybean hulls can be used to supplement and extend hay and pasture during drought periods. Things to consider are the availability, storage, handling, feeding, and price of commodities. The ability to readily get and store commodities and efficiently feed them is critical if they are going to be a key component in your drought management strategy.

Wean and sell calves early. This has a two-fold effect, first it reduces the number of grazing units and the total forage needed, and second it reduces the nutritional requirements of the brood cows. A dry cow has an energy and protein requirement that will be 15% and 30% lower than a lactating cow (Table 1). If this a drought management strategy that you are going to employ, make sure and sell calves before markets are flooded and prices drop.

Nutrient requirements of various livestock classes.

Animal Class	Total Digestible Nu- trients (%)	Crude Protein (%)
Growing steer, 450 lb, gaining 1.5 lb/day	65	12
Growing steer, 650 lb, gaining 1.7 lb/day	68	10
Beef cow, lactating	60	10
Beef cow, mid-gestation	50	7
Lamb, finishing	70	12
Ewe, lactating	65	13
Ewe, mid-gestation	55	9
Meat goat, lactating	66	15
Meat goat, growing	62	13
Pleasure horse	70	10

Adapted from Southern Forages, Fifth Edition.

Sell cows. This could be a good time to get rid of those older cows that you have been meaning to cull. However, selling your better animals is probably one of the least desirable drought management strategies. If you have invested time and money developing a superior herd, you are probably not eager to sell those animals when prices could be low. In addition, if you sell off a considerable portion of your herd it may take years to build back up to that level. However, if this is the management strategy that you have chosen then you need to sell at the set time. By doing this you may limit losses by beating the flood of animals that typically enter the market as the drought worsens.

Managing Pastures in the Short-term

This article layouts a series of practices that together will improve drought tolerance of grazing systems in the long-term. In the short-term, the best thing that we can do to mitigate the impact of drought is to close the gates and feed hay in a sacrifice area BEFORE pasture become overgrazed. The worst possible scenario is that we simply open all the gates and allow cows to damage our entire grazing platform. So, keep the gates closed and feed hay on your weakest paddock. This will ensure that the remaining paddocks will be protected and ready to grow when rain finally comes! Last thing, it never hurts to ask the Good Lord for a little rain!

For additional information on managing your pastures, or any other questions contact — Ted Johnson, CEA for Agriculture & Natural Resources Education