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2022 Kentucky Grazing Calendar Sponsored by Gallagher North America

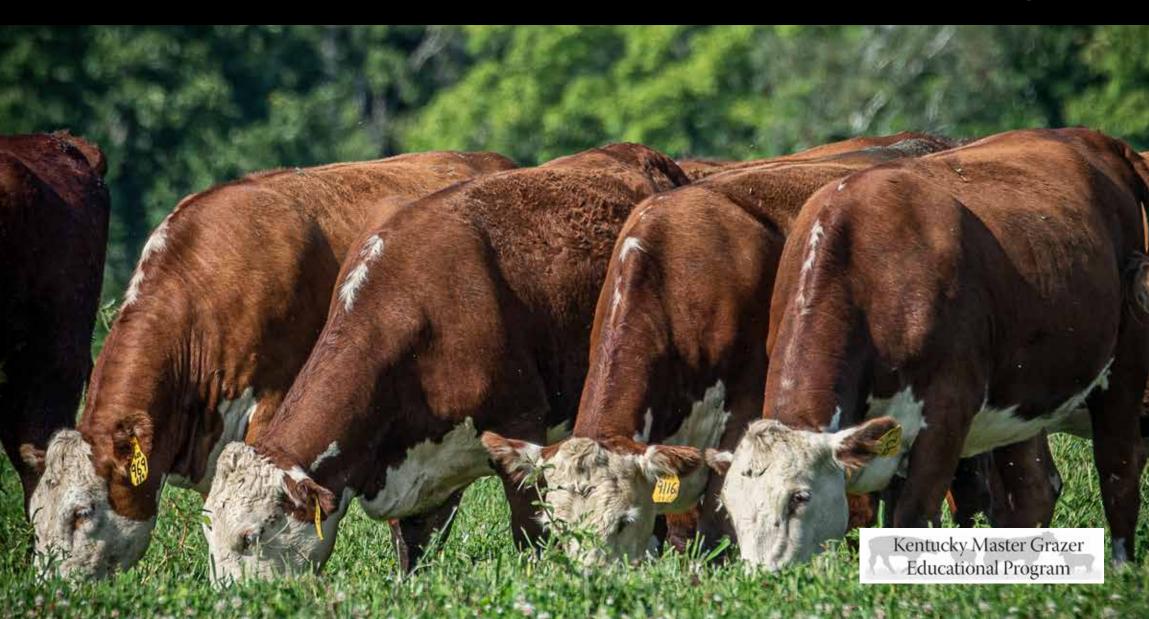


### Kentucky Master Grazer Educational Program

## 2022 Kentucky Grazing Calendar

BETTER PASTURE & GRAZING MANAGEMENT





#### **Dedication**

### **Buddy Rowlett**

The 2022 Kentucky Grazing Calendar is dedicated to Buddy Rowlett, Director of Sales, Southwest Region for Gallagher Animal Management.

Buddy was instrumental in the development and implementation of the first Kentucky Grazing School in 1996. He is a gifted teacher of the art and science of modern high tensile electric fence.

Buddy Rowlett is a lifelong agriculturalist and livestock and forage management professional. In addition to his role as Regional Sales Manager with Gallagher Animal Management, Buddy and his wife Kelley own and operate Duck River Farms, a registered Angus seed stock operation.

Originally from West Tennessee, Buddy and Kelley now reside in Richmond, Kansas. Buddy got his start in the livestock management industry with Gallagher in the early 1990's as a Territory Manager in Tennessee and Kentucky.

The editors of the 2022 Kentucky Grazing Calendar are deeply indebted to Buddy Rowlett for his tireless support of the Kentucky Grazing School and for his many contributions to forage agriculture across the county.



### The Cattle Producer's Resource

#### **Body Condition Scoring (BCS) Guidelines**

Condition Score										
		Too thin			ust Right	t	Too Fat			
Trait	1	2	3	4	5	6	7	8	9	
Visible Ribs	All	All	Most	3-5	1-2	0	0	0	0	
Visible Spine	++++	+++	+	+	No	No	No	No	No	
Brisket Fat	No	No	No	No	No	+	++	+++	++++	
Tail Head Fat (Pones)	No	No	No	No	No	No	+	++	+++	
Muscle Loss	+++	++	+	No	No	No	No	No	No	

- If cows are too thin (condition score of 4 or less), they are likely to have trouble re-breeding and probably need improved grazing or supplement.
- Cows with 5 BCS may need some supplement or high quality pasture.
- Cows scoring 6 or 7 need minimal fall adjustment in management
- Fat cows (8-9) often are not pregnant or skipped calving last year. If she has a good calf and is pregnant keep her!

(++++ indicates an increase or decrease in the trait relative to a 5 BCS)

#### Depending on available forage and current herd requirements, diet supplementation may be required.

- Calculations are usually based on 2-4 ozs of mineral consumption.
- Mineral requirements change with available forage: forbs/ shrubs offer more minerals than grasses.
- Producers need to switch to a high magnesium mineral at least 60 days before the calving season.
- Sulfur is generally in excess in TN and can be antagonistic to copper, zinc, iron and manganese.

### Recommended Minimum Levels for Beef Cattle

**Element Level** 10 to 24% Calcium 5 to 12% Phosphorus Magnesium 2% Magnesium 10 to 16% Sulfur 1% 2000 ppm Manganese 1750 ppm Copper 3500 ppm Zinc Cobalt 20 ppm lodine 50 ppm Selenium 44 ppm

#### Gestation Table Based on 283 Days

(Noble Foundation)

Breeding Date	Calving Date	Breeding Date	Calving Date	Breeding Date	Calving Date
1-Jan	13-Oct	7-May	16-Feb	10-Sep	22-Jun
8-Jan	20-0ct	14-May	23-Feb	17-Sep	29-Jun
15-Jan	27-0ct	21-May	2-Mar	24-Sep	6-Jul
22-Jan	3-Nov	28-May	9-Mar	1-Oct	13-Jul
29-Jan	10-Nov	4-Jun	16-Mar	8-0ct	20-Jul
5-Feb	17-Nov	11-Jun	23-Mar	15-0ct	27-Jul
12-Feb	24-Nov	18-Jun	30-Mar	22-0ct	3-Aug
19-Feb	1-Dec	25-Jun	6-Apr	29-0ct	10-Aug
26-Feb	8-Dec	2-Jul	13-Apr	5-Nov	17-Aug
5-Mar	15-Dec	9-Jul	20-Apr	12-Nov	24-Aug
12-Mar	22-Dec	16-Jul	27-Apr	19-Nov	31-Aug
19-Mar	29-Dec	23-Jul	4-May	26-Nov	7-Sep
26-Mar	5-Jan	30-Jul	11-May	3-Dec	14-Sep
2-Apr	12-Jan	6-Aug	18-May	10-Dec	21-Sep
9-Apr	19-Jan	13-Aug	25-May	17-Dec	28-Sep
16-Apr	26-Jan	20-Aug	1-Jun	24-Dec	5-Oct
23-Apr	2-Feb	27-Aug	8-Jun	31-Dec	12-0ct
30-Apr	9-Feb	3-Sep	15-Jun		

### **January Monthly Tips**

- Remove animals from very wet pastures to limit pugging and soil compaction.
- Feed best hay to animals with highest nutritional needs and supplement poor quality hay as indicated by forage testing.
- Feed hay in areas where mud is less of a problem.
- Feed hay in poor pastures to increase soil fertility and enhance organic matter.
- Consider "bale grazing" set out hay when the ground is dry or frozen. Use temporary fencing to allocate bales as needed.
- Prepare for pasture renovation by purchasing improved varieties, inoculant, etc. and getting equipment ready.



systems and are NOT a component that you should try to "save" money on. A low-cost energizer often costs more in terms future repairs and replacements. If electrical service is available, plug in energizers are considerably more powerful and offer the best value in terms of cost to power ratio. For remote areas, solar or battery powered energizers are viable alternatives for smaller acreages. Power comparisons of energizers should be done using "stored energy" which is measured in joules.



# **JANUARY**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes:
Broadleaf Weed Control Opportunities See AGR-207 for more information.	BUTTERCUP	MOUSE EAR CHICKWEED	DECEMBER 2021  S M T W T F S  1 2 3 4  5 6 7 8 9 10 11  12 13 14 15 16 17 18  19 20 21 22 23 24 25  26 27 28 29 30 31	30	New Year's Eve	New Year's Day	
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
16	17  Martin Luther  King Day	18	19	20	21	22	
23	24	25	26	27	28	29	
30	31	1	grazing systems. We few nutrients from to management can re in areas where anim stocking improves d	d urine are valuable co ell managed grazing sy the overall system. How sult in overconcentrat als congregate. Imple lung and urine distribu thens nutrient cycling.	ystems remove very wever, poor grazing ion of nutrients menting rotation tion within grazing	FEBRUARY 2022  S M T W T F S  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	

### **February Monthly Tips**

- Continue grazing stockpiled tall fescue if available.
- Begin frost seeding with 6-8 lb/A red and 1-2 lb/A ladino white clover on closely grazed pastures.
- On pastures with lower fertility, consider adding 10-15 lb/A annual lespedeza to the above recommendation.
- Consider applying 40-50 lb/A nitrogen in mid- to late-February on some pastures to promote early growth.
- Service and calibrate no-till drills. (see calibration procedure in back of calendar)
- Apply lime and fertilizer according to soil test if not done in fall.



Grounding system. For an electric fencing to work properly, current from the fence must travel though the animal into the ground and back to the energizer. The grounding system works as an "antenna" to collect this current and complete the circuit. Most of the problems associated with low voltage on an electric fence are caused by a poorly constructed grounding system. Grounding systems should have a minimum of 3 galvanized grounding rods, 10 feet apart, 6 feet in the ground, all connected with a single galvanized wire running from the energizer. For a very large energizers or very dry conditions more grounding rods may be needed.



# **FEBRUARY**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes:
University of Kentu	improved varieties of re icky has one of the mos osing varieties that hav nd persistence.	st extensive variety tes	sting programs in the	PURPLE DEADNETTLE	HENBIT	JANUARY 2022  S M T W T F S  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
30	31	1	Groundhog Day	3	4	5	
6	7	8	9	10	11	12	
13	14 Valentine's Day	15	16	17	18	19	
20	President's Day	22	23	24	25	26	
27	28	1	COCKLEBURR	POISON HEMLOCK	Broadleaf Weed Control Opportunities See AGR-207 for more information.	MARCH 2022  S M T W T F S  1 2 3 4 5  6 7 8 9 10 11 12  13 14 15 16 17 18 19  20 21 22 23 24 25 26  27 28 29 30 31	

### **March Monthly Tips**

- Continue pasture renovation by no-tilling seeding legumes (1/4 to 1/2 inch seeding depth).
- Continue feeding hay until adequate forage exists in the pasture for grazing.
- Spring seeding of grasses should be done in early to mid-March (but fall is preferred)
- Begin smoothing and re-seeding hay feeding and heavy traffic areas.
- Graze pastures overseeded with clover to reduce competition from existing grasses; pull animals off as clover seedlings start to be grazed.
- Provide free choice high-magnesium mineral to prevent grass tetany on lush spring growth.



Connect wires in parallel at the end of runs. A good way to increase the ability of a fence to carry voltage is to connect all the wires at the beginning and end of runs of multi-wire fence. This allows the multiple strands of high tensile wire to function as one large wire that is capable of carrying higher levels of voltage.



# MARCH

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes:
60 in a matter of we growth is critical. Ma fences. Clear limbs t	tune-up. Pasture grow eks. Being ready to uti arch is a good month to that may have fallen ov e sure that temporary f	lize rapid spring o check and repair er the winter, check	BROADLEAF PLANTAIN	NARROWLEAF PLANTAIN	Broadleaf Weed Control Opportunities See AGR-207 for more information.	FEBRUARY 2022  S M T W T F S  1 2 3 4 5  6 7 8 9 10 11 12  13 14 15 16 17 18 19  20 21 22 23 24 25 26  27 28	
27	28	1	2	3	4	5	
6	7	8	9	10	11	12	
Daylight Savings Begins	14	15	16	St. Patrick's Day	18	19	
First Day of Spring	21	22	23	24	25	26	
27	28	29	30	31	1	APRIL 2022  S M T W T F S  1 2  3 4 5 6 7 8 9  10 11 12 13 14 15 16  17 18 19 20 21 22 23  24 25 26 27 28 29 30	

#### **April Monthly Tips**

- Graze winter annuals that were planted last fall.
- As pasture growth begins, rotate through pastures quickly to keep up with rapid spring growth.
- Creep-graze calves and lambs, allowing them access to highest-quality pasture.
- 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 reduce grass competition.



Always use underground cable designed for electric fencing and place it in protective tubing. It is very important to only use underground cable that is designed for electric fence. Never use any product that is intended for residential use. Whenever a cable carrying current is run under the ground, always place it in some type pipe or conduit that will protect it from future damage. Wires going under gates should be buried to a depth of approximately 1 foot.



## **APRIL**

Sunday	Monday	luesday	Wednesday	Ihursday	Friday	Saturday	Notes:
so that the growth r	rs to staging pastures ranges from those se pastures "ready to oppose mplished by moving the spring since	MARCH 2022  S M T W T F S  1 2 3 4 5  6 7 8 9 10 11 12  13 14 15 16 17 18 19  20 21 22 23 24 25 26  27 28 29 30 31	30	31	1	2	
3	4	5	6	7	8	9	
10	11	12	13	14	15 Good Friday	16	
17 Easter	18	19	20	21	22	23 Earth Day	
24	25	26	27	28	29	30	
1	COMMON COCKLEBUR	SPINY PIGWEED	DOCK	RAGWEED	Broadleaf Weed Control Opportunities See AGR-207 for more information.	8 9 10 11 12 13 14 15 16 17 18 19 20 21	

### **May Monthly Tips**

- Seed warm season annual grasses once soil temperature reaches 60 F.
- Clip, graze or make hay to prevent seedhead formation in cool season pastures.
- Rotate cool season pastures when residual is 3-4 inches.
- Consider temporary electric fencing to subdivide larger pastures and exclude areas for mechanical harvesting.
- Scout pastures for summer annual weeds and control when small.



Use offsets on existing fencing. A good way to protect new fencing or enhance existing fencing is to use an offset strand of electrified fencing. Installing a single strand of electric fence on the perimeter of pastures allows graziers complete flexibility to quickly and easily subdivide existing pastures with polywire and step in posts. There a number of different styles of offsets including wire, plastic, pigtail, and fiberglass. All styles can work, but it is important that any plastic or fiberglass materials are UV stabilized and come with a warranty.



# MAY

S	unday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes:
gı fa be ha	rowth stage. Stage actor impacting the e cut at the boot st	hay quality by cutting e of maturity is the sing nutritional value of ha age. Rainfall in the spr eage allows producers	gle most important ay. Grasses should ring often delays	TALL IRONWEED	CHICORY	APRIL 2022 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		
1		2	3	4	5	6	7	
8	Mother's Day	9	10	11	12	13	14	
1	.5	16	17	18	19	20	21	
2	2	23	24	25	26	27	28	
2	.9	Memorial Day	31	1	BIENNIAL THISTLES	Broadleaf Weed Control Opportunities See AGR-207 for more information.	JUNE 2022  S M T W T F S  1 2 3 4  5 6 7 8 9 10 11  12 13 14 15 16 17 18  19 20 21 22 23 24 25  26 27 28 29 30	

### **June Monthly Tips**

- Make plans to attend the KFGC's Forage Tours.
- Clip pastures for weeds and seedheads as needed.
- Use portable fencing to increase paddock numbers to allow for longer recovery periods.
- When present, crabgrass and johnsongrass can provide high quality summer grazing.
- Begin grazing native and annual warm-season grasses. Start at 18-20" and stop at 8-10".



Always connect electrified wires with clamps. Loose connections for result loss of voltage. Connections should NOT be wrapped, but rather clamped together with a high-quality clamp that is designed for high tensile fencing. Never use clamps that constructed of dissimilar metals. Although economy clamps constructed of cast metal are sometimes available, they often fail upon tightening. Saving a few cents on clamps often leads to exponential headaches in the future.



# JUNE

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes:
<b>Bonus Tip:</b> Novel endophyte tall fescue. The toxic endophyte in tall fescue costs the livestock industry in the United States more than \$1 billion annually. It is like a thief that you do not know is there, causing lower average daily gains and reduced conception rates. Tall fescue varieties infected with a novel endophyte have improved persistence and animal performance.			BUTTERCUP	MOUSE EAR CHICKWEED	Broadleaf Weed Control Opportunities See AGR-207 for more information.	MAY 2022 S M T W T F S  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
PURPLE DEADNETTLE	Memorial Day	31	1	2	3	4	
5	6	7	8	9	10	11	
12	13	14 Flag Day USA	15	16	17	18	
19 Father's Day Juneteenth	20	First Day of Summer	22	23	26	25	
26	27	28	29	30	1	JULY 2022  S M T W T F S  1 2  3 4 5 6 7 8 9  10 11 12 13 14 15 16  17 18 19 20 21 22 23  24 25 26 27 28 29 30  31	

### **July Monthly Tips**

- Continue grazing available summer annuals and apply 40-60 lb N/A to stimulate regrowth.
- Identify fescue pastures for stockpiling.
   Choose pastures that are well drained, have a strong sod and have not been overgrazed.
- Soil test pastures to determine fertility needs.
- Using UK variety trial results, select varieties to plant in the fall and order seed.
- If drought conditions limit pasture growth, close off pastures and feed hay in a sacrifice area.



**Utilize new technologies to manage electric fencing systems.** There are now several options that allow you to remotely manage electric fencing systems. These include remote controls that allow fences to be turned on and off when making fence repairs and phone apps that allow the fence to be monitored remotely.



# JULY

## 2022

Sunaay	мопаау	Tuesaay	weanesaay	Inursaay	Friday	Saturaay	Notes:
Bonus Tip: Brown mi annual grasses that I have increased diges improved animal per possible, select varie BMR trait.	have the BMR trait stibility resulting in formance. Whenever	HENBIT	JUNE 2022  S M T W T F S  1 2 3 4  5 6 7 8 9 10 11  12 13 14 15 16 17 18  19 20 21 22 23 24 25  26 27 28 29 30	30	1	2	
3	Independence Day	5	6	7	8	9	
10	11	12	13	14	15	16	
17	18	19	20	21	22	23	
24	25	26	27	28	29	30	
31	1	COCKLEBURR	POISON HEMLOCK	BROADLEAF PLANTAIN	Broadleaf Weed Control Opportunities See AGR-207 for more information.	AUGUST 2022  S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	

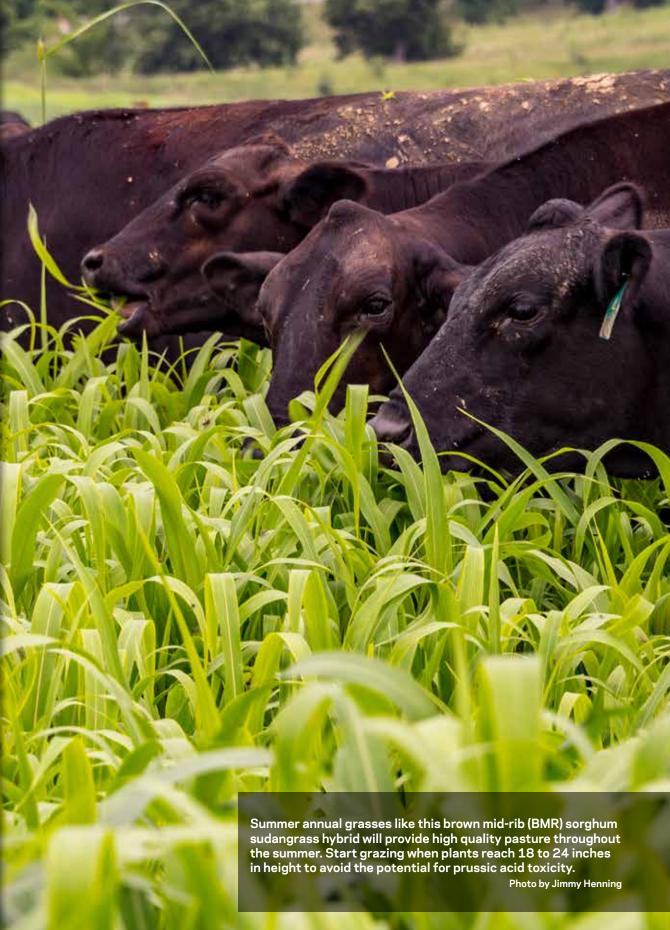
Sunday Monday Tuesday Wednesday Thursday Friday Saturday

#### **August Monthly Tips**

- Do NOT graze cool-season pastures closer than 3 to 4 inches. This will help to conserve soil moisture and prevent overheating of the crowns.
- Graze warm season annuals or perennials to allow cool season grasses to recover and to avoid endophyte-infected fescue.
- After the first good rain in August, seed winter annuals (such as small grains, ryegrass, crimson clover, and brassicas) for late fall and early spring grazing.
- Plant alfalfa after first good rain in August to allow sufficient size going into winter.
- In mid-August to early September, exclude livestock from pastures to be stockpiled and apply 60 lb N/A and any needed P and K.



To facilitate running temporary fence across paddocks of tall growing summer annuals like this sorghum-sudangrass hybrid, drive an all-terrain vehicle across the paddock first to make a path. This alley will also keep forage off the electrified fence.



# AUGUST

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes:
Bonus Tip: Weeds of summer grasses the considered weeds of high quality summer managed. These special grass, Johnson Bermudagrass.	at are commonly can actually provide r grazing when recies include	NARROWLEAF PLANTAIN	COMMON COCKLEBUR	SPINY PIGWEED	JULY 2022  S M T W T F S  1 2  3 4 5 6 7 8 9  10 11 12 13 14 15 16  17 18 19 20 21 22 23  24 25 26 27 28 29 30  31	30	
31	1	2	3	4	5	6	
7	8	9	10	11	12	13	
14	15	16	17	18	19	20	
21	22	23	24	25	26	27	
28	29	30	31	1	Broadleaf Weed Control Opportunities See AGR-207 for more information.	SEPTEMBER 2022  S M T W T F S  1 2 3  4 5 6 7 8 9 10  11 12 13 14 15 16 17  18 19 20 21 22 23 24  25 26 27 28 29 30	

#### **September Monthly Tips**

- If not already done, soil sample and apply lime and fertilizer as needed.
- Plant perennial grasses and legumes. Consider using a novel endophyte tall fescue.
- Harvest hay as needed. Do NOT harvest alfalfa after mid-September.
- Closely monitor livestock and do NOT overgraze.
   Pasture plants accumulate energy reserves in the fall that help them overwinter and regrow in the spring.
- Feed hay to allow pastures to stockpile for winter grazing.
- Rest native warm-season grass fields until after frost for better winter survival.



Use high quality temporary fencing. Temporary fencing comes in a number of styles including polywire, electric tape, electric braid, and polyrope. Electric tape should be used where high visibility is needed. Polywire is most commonly used by graziers since longer runs can be held on reels. When selecting polywire products, chose products that contain more strands of wire and for loner runs, choose products that contain wire made of mixed metals. Polywire containing mixed metals are about 40 times more conductive.



# SEPTEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes:
DOCK	AUGUST 2022  S M T W T F S  1 2 3 4 5 6  7 8 9 10 11 12 13  14 15 16 17 18 19 20  21 22 23 24 25 26 27  28 29 30 31	30	31	1	2	3	
4	5 Labor Day	6	7	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	First Day of Fall	23	24	
25	26	27	28	29	30	1	
often higher than th hay, you not only ge	r buying hay. The cost e cost of buying hay. W t the feed value of the e nutrients that it conta	hen purchasing hay, but also the	RAGWEED	TALL IRONWEED	Broadleaf Weed Control Opportunities See AGR-207 for more information.	OCTOBER 2022  S M T W T F S  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	

### **October Monthly Tips**

- Feed hay to allow cool-season pastures to accumulate forage growth for winter grazing.
- Do NOT harvest or graze alfalfa fields.
- Inventory and test each hay lot for nutritive value and consult a nutritionist to design a supplementation program as needed.
- Remove livestock from pastures that contain sorghum species (sorghum-sudangrass, sudangrass, and johnsongrass) when frost is expected to prevent cyanide poisoning.
- Begin strip grazing early planted small grain and brassicas (turnips and rape) mixes by the end of this month.



Use a high quality geared reel. High quality reels are an essential part of temporary fencing systems. They should be constructed of UV stabilized plastic, have insulated handles, and a positive locking mechanism. Geared reels are ideal since they make wire retrieval much faster. It is tempting to save a few dollars on "economy" reels, however, these reels rarely last more than a season or two.



# OCTOBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes:
October and Novem	v in October and Nover ber allows grass being v. In addition, condition all than during the wing	stockpiled for winter	CHICORY	SEPTEMBER 2022  S M T W T F S  1 2 3  4 5 6 7 8 9 10  11 12 13 14 15 16 17  18 19 20 21 22 23 24  25 26 27 28 29 30	30	1	
2	3	4	5	6	7	8	
9	Columbus Day Indigenous Peoples' Day	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
30	31 Halloween	1	BIENNIAL THISTLES	BUTTERCUP	Broadleaf Weed Control Opportunities See AGR-207 for more information.	NOVEMBER 2022  S M T W T F S  1 2 3 4 5  6 7 8 9 10 11 12  13 14 15 16 17 18 19  20 21 22 23 24 25 26  27 28 29 30	

### **November Monthly Tips**

- Apply 30-40 lb N/A to strengthen cool-season grass sods.
- Using a plate meter or grazing stick, estimate stockpile available for winter grazing.
- Adjust animal numbers or purchase additional hay to balance forage-feed supply to livestock needs.
- Graze crop residues and cover crops that will not overwinter.
- Graze winter annuals once they are 6-8 inches tall and are well anchored. Do NOT graze closer to 4 inches.
- Alkaloid content of tall fescue can be high in some years, but will begin decline after a hard freeze.



**Use fault finder to monitor voltage and find shorts.** For electric fencing to work properly, a voltage of approximately 5000 volts should be maintained at all times. Shorts in electric fences can cause reduced voltage and can often be difficult to find. A fault finder shows the direction and severity of the of the short. Purchasing a high-quality fault finder is money well spent!



# NOVEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes:
thing, but efficiently fescue can increase	aze stockpiled grass. C y harvesting it is anoth e grazing days by more neyfor every 2 days c	er. Strip grazing tall than 30%. This is	MOUSE EAR CHICKWEED	PURPLE DEADNETTLE	HENBIT	OCTOBER 2022  S M T W T F S  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
30	31 Halloween	1	2	3	4	5	
Daylight Savings Time Ends	7	8	9	10	11 Veterans Day	12	
13	14	15	16	17	18	19	
20	21	22	23	Thanksgiving Day	25	26	
27	28	29	30	1	Broadleaf Weed Control Opportunities See AGR-207 for more information.	DECEMBER 2022 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	

### **December Monthly Tips**

- Begin utilizing stockpiled pastures. Graze pastures with orchardgrass and clovers first.
   Save tall fescue pastures for late winter grazing.
- Using polywire, strip graze stockpiled pastures to improve utilization. Start at the water source and allocate enough forage for 2-3 days. Back fencing is not necessary.
- Make plans to frost seed red and white clover onto closely grazed tall fescue pastures in February.
- Begin hay feeding as stockpiled forage is used up.
- Minimizing waste by utilizing ring feeders.



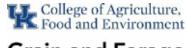
Train livestock to electric fencing. Since electric fencing is a psychological barrier rather than a physical barrier, livestock must be trained to respect it. Choose a well fenced holding paddock and install an offset wire about 30 inches above the ground. Make sure the energizer and grounding system are optimized to deliver a knee buckling and eye watering shock. Once animals are trained to the offset, set up a strand of polywire near the end of the paddock. Livestock should be fully trained within 48 hours. Animals that cannot be trained to respect electric fencing, should be culled.



# DECEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes:
COCKLEBURR	POISON HEMLOCK	NOVEMBER 2022  S M T W T F S  1 2 3 4 5  6 7 8 9 10 11 12  13 14 15 16 17 18 19  20 21 22 23 24 25 26  27 28 29 30	30	1	2	3	
4	5	6	7	8	9	10	
11	12	13	14	15	16	17	
18  Hanukkah  Begins	19	20	First Day of Winter	22	23	24 Christmas Eve	
25 Christmas Day	Hanukkah Ends Kwanzaa Begins	27	28	29	30	New Year's Eve	
New Year's Day Kwanzaa Ends	over the last year and that didn't go as plant make plans for the up only set long-term go can be achieved in the	nd plan. December is a g I think about things that ned. It is also a good tim ocoming grazing season als, but also more imme e upcoming year. Make s them up where you will	went right and things e to set goals and It is important to not diate objectives that sure and write these	BROADLEAF PLANTAIN	Broadleaf Weed Control Opportunities See AGR-207 for more information.	JANUARY 2023  S M T W T F S  1 2 3 4 5 6 7  8 9 10 11 12 13 14  15 16 17 18 19 20 21  22 23 24 25 26 27 28  29 30 31	

### Don't Make a Mistake — Calibrate!!



#### Grain and Forage Center of Excellence







**Items Needed to Calibrate Drill:** 

2. Flags to mark stopping and starting points

3. Gram scale with 0.1-gram accuracy

1. Tape measure (150 feet)

4. Plastic sandwich bags

6. Screwdriver and pliers

5. Rubber bands

- 1) Read your drill's operators manual to learn where the adjustments for leveling, seed depth, and seeding rate are located.
- 2) Ensure that seed tubes are not blocked by spraying them out with an air hose and running a wire through them. DO NOT SKIP THIS STEP!!!
- 3) Use the "Seeding Rate Chart" on the drill to determine the initial drill setting and set the drill accordingly.
- 4) Select the proper gear box setting or drive gear for the desired target seeding rate based on the manual.
- 5) Place a small amount of seed above each opening in the drill box.
- 6) Lower the drill to engage the seeding mechanism.
- 7) If calibrating the drill in place, jack up the drive wheel just far enough off the ground so that it can be rotated.
- 8) Turn the seeding mechanism until seed comes out. Make sure that seed is coming out of each disk opener.
- 9) Disconnect three to five seed tubes from the disk openers.
- 10) Place and secure a collection container on each seed tube. A sandwich bag secured with a rubber band works well.
- 11) Pull the drill 150 feet OR turn the drive wheel the number of revolutions it would take to travel 150 feet.
  - a. Revolutions can be determined by using the following formula: Number of Revolutions = 150 / (3.14 x Diameter of the Drive Wheel in feet).
- 12) Carefully remove collection containers.
- 13) Tare the scale for an empty collection container and then weigh and record in grams each collection container with the seed in it.
- 14) Add the seed weight for each collection container together and divide by the number of seed drop tubes collected to get the AVERAGE weight per disk opener.
- 15) Compare the AVERAGE weight per disk opener to the grams of seed/disk opener found in Table 1 for the desired seeding rate and row spacing.
  - a. If the collected weight is within 10% of the target weight found in Table 1, then you are finished.
  - b. If the collected weight is more than 10% different than the target weight found in Table 1, repeat steps 7 to 12 after adjusting seeding rate setting on drill.

Table 1. Grams of seed to catch per disk opener in 150 feet for given combinations of disk opener width (inches) and seeding rate (pounds/acre).

										S	eedin	g Rate	e in po	ounds	/acre								
Distance between Disk Openers	2	4	6	8	10	12	14	16	18	20	25	30	35	40	50	60	80	90	100	120	140	160	180
inches		grams of seed/disk opener to catch in 150 feet																					
6	1.6	3.1	4.7	6.3	7.8	9.4	10.9	12.5	14.1	15.6	19.5	23.5	27.4	31.3	39.1	46.9	62.5	70.4	78.2	93.8	109.4	125.1	140.7
7	1.8	3.6	5.5	7.3	9.1	10.9	12.8	14.6	16.4	18.2	22.8	27.3	31.9	36.5	45.6	54.7	72.9	82.0	91.1	109.4	127.6	145.8	164.1
7.5	2.0	3.9	5.9	7.8	9.8	11.7	13.7	15.6	17.6	19.5	24.4	29.3	34.2	39.1	48.9	58.6	78.2	87.9	97.7	117.3	136.8	156.3	175.9
8	2.1	4.2	6.3	8.3	10.4	12.5	14.6	16.7	18.8	20.9	26.1	31.3	36.5	41.7	52.1	62.6	83.4	93.8	104.3	125.1	146.0	166.8	187.7

A YouTube video on grain drill calibration can be viewed on the KYForages YouTube Channel at <a href="https://www.youtube.com/c/KYForages">https://www.youtube.com/c/KYForages</a>

### Forage Crop Guide for Kentucky

Uses	Seed Size: lbs./bu. or (seeds/lbs.)	Desired Plant Density	Seeding Rate/A	Seeding Depth (inches)	Seeding Date	First Harvest <sup>1</sup>	Annual Yield <sup>2</sup>	Comments
Alfalfa—Medico	ago sativa							
hay, silage, pasture	60 (227,000)	25-40 plants/sq. ft. seeding year	18-20 lbs.	1/4-1/2	Primary: Mar 15-May 1 Secondary: Aug 1-Sep 15	May 1- Sep 15	3-6 T	Correct soil acidity at least 4 months before seeding. Inoculate seed. Monitor alfalfa weevil and leafhopper, and spray as recommended. <i>Spring seeding</i> : seed after risk of killing frost. <i>Fall seeding</i> : seed early to reduce risk of Sclerotinia.
Bermudagrass,	Seeded—Cyno	don dactylon						
hay, pasture	40 (2,071,000)		5-10 lbs. (hulled seed)	1/4 (hulled seed)	Apr 15-Jun 1	May 15-Sep 15	2-6 T	Warm-season perennial. Harvest 5 times per season for hay. Seed after risk of frost. Ensure seeded variety is winter-hardy in Kentucky.
Bluestem, Big-	Andropogon g	erardii						
wildlife, hay, pasture	(165,000)		9-11 lbs. PLS <sup>3</sup>	1/4-1/2	Apr 15-Jun 1	Jun 15- Jul 15	21/2-31/2 T	Light, fluffy seed. Sensitive to overgrazing. Slow to establish. Seed after risk of frost.
Bluestem, Little	—Schizachyriu	m scoparium	1	•		•		
wildlife, pasture	(260,000)		7-9 lbs. PLS <sup>3</sup>	1/4	Apr 15-Jun 1	Jun 15- Sep 15	11/2-2 T	Primarily used in native grass mixtures at rates of 1 to 2 lbs./A. Sensitive to overgrazing. Upright, bunchgrass similar in appearance to broom sedge. Slow to establish.
Clover, Crimson	Trifolium inc	carnatum		l				
hay, pasture	60 (150,000)		20-30 lbs.	1/4-1/2	Aug 1-Oct 15	May 1- May 15	1-21/2 T	Inoculate. Annual clover. Fall planted for spring forage production or as a plow-down crop. If possible, use "Kentucky Pride" due to it increased cold tolerance.
Clover, Red—Tr	ifolium praten	se						
hay, pasture	60 (272,000)		8-12 lbs.	1/4-1/2	Primary: Feb 1- Apr 15 Secondary: Aug 1- Sep 15	May 1- Sep 15	2-5 T	Inoculate. Do not graze or clip after Sept. 15 until after freeze. Use improved varieties for 2- to 3-year stands.
Clover, White (l	adino and Dut	ch or Commor	types)—Trifol	ium repens				
pasture	60 (768,000)		1-3 lbs.	1/4	Feb 1- Apr 15	Aug 1- Sep 10	1-3 T	Good for all permanent pasture mixtures. Inoculate. Use ladino type for higher forage yield.
Eastern Gamag	rass—Tripsacui	m dactyloides						
grazing, hay			7-10 lbs.	1/2-1	Apr 15- Jun 15	Jun 1	4-6 T	Highest quality native warm-season perennial. Slow to establish.
Fescue, Tall—Fe	estuca arundin	асеа		•		•		
hay, pasture	22 (227,000)		15-25 lbs.	1/4-1/2	<i>Primary:</i> Aug 20-Oct 1	May 1-20	2-4 T	KY31 variety contains fungal endophyte that causes toxicity in livestock. Use low-endophyte or novel-endophyte varieties.

## Forage Crop Guide for Kentucky (continued)

Uses	Seed Size: lbs./bu. or (seeds/lbs.)	Desired Plant Density	Seeding Rate/A	Seeding Depth (inches)	Seeding Date	First Harvest <sup>1</sup>	Annual Yield <sup>2</sup>	Comments
					Secondary: Feb 15- Apr 15			
Indiangrass—Sor	ghastrum nut	ans						
hay, pasture, wildlife	(175,000)		9-11 lbs.	1/4-1/2	Apr 15-Jun 1	Jul 15- Sep 15	2-4 T	Light, fluffy seed. Needs special drills for no-till seeding. Latest maturity of native grasses. Sensitive to overgrazing and slow to establish.
Kentucky Bluegra	nss—Poa prate	ensis						
pasture	14 (1,400,000)		10-15 lbs.	1/4	Primary: Aug 15- Sep 15 Secondary: Feb 15-Apr 15	May 1-15	1-3 T	Tolerant to close grazing. Lower forage yield than other cool-season grasses.
Lespedeza, Annu	<b>al</b> —Kummero	wia stipulace	a—Korean; K. st	riata—Kobe d	or Striate types)			
pasture, hay	30 (240,000)		20-25 lbs.	1/4	Feb 15-Apr 1	Aug 15	1-21/2 T	Inoculate. Annual warm-season legume. Tolerant to low pH and low P.
Lespedeza, Serci	cea— Lespede	za cuneata						
hay, pasture	60 (372,000) hulled seed		35 (scarified) lbs.	1/4	Mar 15-Apr 15	Hay: May 15-Sep 15	1-3 T	Harvest at an immature stage of growth to maintain quality (12-14" high). Inoculate. Used mainly for soil conservation purposes.
Millet, Foxtail (G	erman)—Setai	ria italica				•		
hay, pasture	50 (213,000)		20-30 lbs.	1/2-3/4	May 1-Aug 1	Aug 15- Oct 1	11/2-3 T	Used mainly for wildlife feed. Can be used as an emergency hay crop or pasture. Used as a smother crop when reestablishing pasture.
Millet, Pearl—Pe	nnisetum glau	ıcum						
pasture, silage	50 (82,000)		5-7 lbs. in rows, 15-25 broadcast	1/2-3/4	May 1-Aug 1	Jun 15- Oct 15	2-5 T	Good for summer pasture. Potential for nitrate problems (see ASC-57, Cattle-Related Forage Disorders, for more details).
Oats, Winter and	Spring—Aver	na sativa						
hay, silage	32 (15,000)	25-30 plants/sq. ft.	2.5-3 bu. (forage)	1-2	Mar 1-Apr 1, Sep 15-30	May 20-Jun 10	4-9 T at 65% moisture	Spring oats are seeded as a grain crop or as emergency hay or silage. Winter oats are least winter-hardy of small grains. Preferred companion crop when seeding perennial forages since they are the least competitive small grain.
Orchardgrass—D	actylis glomei	rata	<u> </u>					

## Forage Crop Guide for Kentucky (continued)

	Seed Size: lbs./bu. or	Desired Plant	Seeding	Seeding Depth		First	Annual	
hay, pasture	(seeds/lbs.)  14 (416,000)	Density	<b>Rate/A</b> 15-20 lbs.	(inches) 1/4-1/2	Seeding Date  Primary: Aug 20-Sep 20	Harvest <sup>1</sup> Primary: May 1-20	Yield <sup>2</sup> 2-4 T	High-quality, high-yielding cool-season grass. Preferred grass for mixtures with alfalfa. Can become clumpy over time.
	(410,000)				Secondary: Feb 15-Apr 15	Secondary: Jul 1-15		mixtures with allana. can become clampy over time.
<b>Rye</b> —Secale cere	eale							
pasture, silage	56 (18,000)	25-30 plants/sqft	1.5-2.5 bu. (forage)	1-2	Sep 1- Oct 15 (forage)	Apr 1-20	5-10 T at 65% moisture	Cut for silage in boot stage. Excellent for grazing and no-till mulch. Best small grain for fall grazing.
Ryegrass, Annua	<b>l</b> —Lolium mul	tiflorum						
pasture, silage, hay	24 (224,000)		20-30 lbs.	1/4-1/2	Aug 15-Oct 1	Mar 15-May 15	11/2-3 T	Used mainly as cover crop or for grazing. Increased use for round bale silage.
Ryegrass, Perenr	nial—Lolium p	erenne						
hay, pasture	24 (330,000)		15-25 lbs.	1/4-1/2	Primary: Aug 20-Oct 1 Secondary: Feb 1-Apr 15	Apr 20- May 10	2-4 T	Use winter-hardy varieties. Average stand length in Kentucky is 2 years. High fertility soils and/or irrigation can extend stand life.
Sorghum, Forage	Sorghum b	icolor						
silage	56 (24,000)		15-20 lbs.	11/2	May 1- Jul 1	Aug 15-Sep 20	15-25 T at 65% moisture	Sorghum/sudangrass hybrid more commonly used for forage.
Soybean—Glyine	e max					l		
silage, hay	60 (2,500- 3,500)	90,000- 150,000 plants/A	1-1.5 bu. (forage)	1-2	May 1- Jun 10	Aug 1- Sep 30 (hay)	2-4 T	Seed size varies by variety. High end of seed rate range for narrow rows and late planting. Inoculate if field has been out of soybean for 3-5 years. Can be seeded as late as July 1 for double cropping. Maturity groups III to early V best suited for Kentucky.
Sudangrass and	Sorghum x Suc	dan Hybrids (Se	orghum bicolor	)				
pasture, silage, hay	40 (35,000- 43,000)		20-40 lbs.	1/2-2	May 10-Aug 1	Jun 15- Oct 15	2-5 T	Excellent warm-season annual pasture or silage crop. Smaller stemmed sudangrass preferred for hay production. Potential for prussic acid and nitrate problems.
Switchgrass—Pa	nicum virgatu	m						
hay, pasture, wildlife	(389,000)		6-8 lbs.	1/4-1/2	Apr 15-May 1	Jun 1- Sep 15	3-5 T	Slick, free-flowing seed. Most tolerant of wet soils of all native grasses. Sensitive to overgrazing. Slow to establish.
Timothy—Phleu	m pratense							
hay	45		6-8 lbs.	1/4-1/2	Aug 20-Oct 1	May 20-Jun	1-3 T	Timothy is desired by some horse owners but is essentially a one-cut

### Forage Crop Guide for Kentucky (continued)

Uses	Seed Size: lbs./bu. or (seeds/lbs.)	Desired Plant Density	Seeding Rate/A	Seeding Depth (inches)	Seeding Date	First Harvest <sup>1</sup>	Annual Yield²	Comments
	(1,152,000)					10		hay crop in Kentucky. Average stand length of 2-3 years.
Triticale—Tritic	um x Secale							
silage	50 (15,000)	25-30 plants/sq ft	2-2.5 bu. (forage)	1-2	Oct 1-30	May 10- Jun 1 (forage)	4-10 T at 65% moisture	Hybrid between wheat and rye. Cut for silage in boot stage. Use winter varieties. Newer varieties have comparable yields to wheat.
Turnips and rela	ated <i>brassicas</i> -	—Brassica rapo	a, Brassica spp					
pasture	55		3-6 lbs.	1/4	Aug 1- Sep 1	Nov 15	2-4 T	Very high-quality pasture (85% digestibility). Often dry hay fed when grazing to add fiber or seeded in mixtures with small grains. New varieties show improved regrowth after grazing.
Wheat—Triticu	m aestivum			l	1			
grain, silage, cover crop	60 (11,000)	25-30 plants/ sq. ft.	2-2.5 bu. (forage)	1-2	Mid-Sep to Late Oct	May 10-Jun 1 (forage)	6-10 T at 65% moisture	Excellent quality silage or feed grain. Cut for silage shortly after heading. Seed size varies by variety. High-yielding grain varieties do not guarantee high-yielding forage or straw. Consult the University of Kentucky variety trials bulletin for specific yield information.

Adapted from Grain and Forage Crop Guide for Kentucky, AGR-18P, University of Kentucky Cooperative Extension Services, Lexington, KY.

### Typical First and Last Occurrences of 32°F in Kentucky

			Date o	of First Fall	Frosta		Date of Last Spring Frost <sup>a,b</sup>					
Location	Coordinates (°)	Median	Early	10%	90%	Late	Median	Early	10%	90%	Late	
Ashland	38.47N 82.63W	10/16	9/08	9/22	11/03	1/01	5/04	4/11	4/14	5/11	6/12	
Berea	37.57N 84.31W	10/24	9/24	10/06	11/13	11/21	4/11	3/25	3/28	5/04	5/10	
Bowling Green	36.98N 84.44W	10/22	10/03	10/08	11/08	11/13	4/11	3/21	3/26	4/25	5/05	
Carrollton	38.65N 85.17W	10/19	10/03	10/06	11/02	11/08	4/21	4/03	4/08	5/05	5/10	
Covington	39.01N 84.51W	10/19	10/02	10/04	11/02	11/08	4/21	3/26	4/10	5/06	5/10	
Farmers	38.15N 83.54W	10/15	9/21	10/03	11/02	11/08	5/02	4/04	4/11	5/15	5/27	
Hopkinsville	36.85N 87.46W	10/20	9/21	10/05	11/06	11/13	4/11	3/21	3/26	4/25	5/05	
Leitchfield	37.46N 86.29W	10/18	10/03	10/05	11/06	11/08	4/19	3/22	4/04	5/08	5/11	
Lexington	38.03N 84.44W	10/25	10/02	10/07	11/09	11/13	4/18	3/26	4/04	5/03	5/10	
London	37.13N 84.07W	10/12	9/23	10/03	11/02	11/13	4/24	3/22	4/07	5/09	5/27	
Mayfield	36.72N 88.64W	10/20	10/02	10/06	11/06	11/12	4/15	3/24	4/05	4/26	5/05	
Maysville	38.61N 83.81W	10/21	10/03	10/04	11/03	11/08	4/24	3/27	4/02	5/09	5/27	
Middlesboro	36.62N 83.73W	10/17	9/29	10/04	11/04	11/14	5/01	4/08	4/12	5/11	5/27	
Monticello	36.85N 84.83W	10/17	10/03	10/04	11/05	11/13	4/25	4/03	4/08	5/08	5/27	
Murray	36.62N 88.31W	10/30	10/03	10/14	11/18	11/21	4/04	3/18	3/20	4/15	4/20	
Owensboro	37.77N 87.11W	10/20	10/03	10/06	11/07	11/13	4/10	3/21	3/25	4/24	5/05	
Paducah	37.08N 88.62W	10/26	10/03	10/09	11/12	11/13	4/08	3/07	3/22	4/18	4/23	
Princeton	37.09N 87.89W	10/20	10/03	10/06	11/06	11/13	4/10	3/21	3/26	4/21	3/26	
Scottsville	36.74N 86.18W	10/24	10/07	10/10	11/14	11/21	4/10	3/21	3/27	4/27	5/27	
Shelbyville	38.21N 85.21W	10/14	9/21	10/01	10/31	11/19	4/23	3/27	4/06	5/11	5/18	
Somerset	37.08N 84.61W	10/13	10/03	10/04	10/31	11/05	4/22	3/22	4/07	5/10	5/27	
West Liberty	37.91N 83.26W	10/09	9/15	9/24	10/17	11/04	5/05	3/29	4/17	5/21	5/27	
Williamsburg <sup>c</sup>	36.74N 84.17W	10/19	9/26	10/04	11/07	11/13	4/22	4/04	4/08	5/10	5/27	

Source: University of Kentucky Agricultural Weather Center, Kentucky Climate Analysis, URL: http://wwwagwx.ca.uky.edu/analysis2/.

Median = date directly between the earliest and latest date of observed last occurrence; Early = earliest date recorded for last occurrence; 10% = date for last occurrence in one out of 10 years; 90% = date for last occurrence in nine out of 10 years; Late = latest

<sup>28</sup> years of data.

### **Additional Resources**

UK Master Grazer Program <a href="https://grazer.ca.uky.edu">https://grazer.ca.uky.edu</a>

University of Kentucky Cooperative Extension <a href="https://extension.ca.uky.edu">https://extension.ca.uky.edu</a>

UK Forage Extension <a href="http://forages.ca.uky.edu">http://forages.ca.uky.edu</a>

UK Forage News <a href="https://kyforagenews.com">https://kyforagenews.com</a>

KYForages YouTube Channel <a href="http://www.youtube.com/c/KYForages">http://www.youtube.com/c/KYForages</a>

Kentucky Forage and Grassland Council https://kfgc.org

Kentucky Natural Resource Conservation Service <a href="https://www.nrcs.usda.gov/wps/portal/nrcs/site/ky/home/">https://www.nrcs.usda.gov/wps/portal/nrcs/site/ky/home/</a>

Kentucky Soil and Water Conservation districts http://conservation.ky.gov/pages/conservationdistricts.aspx

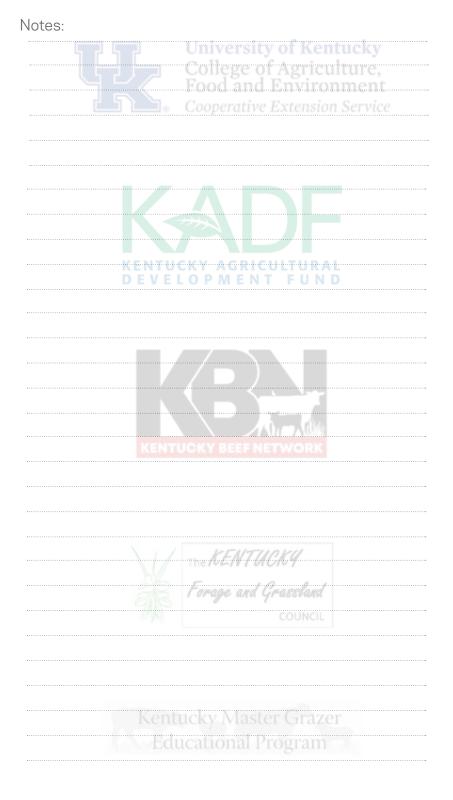
Kentucky Cattlemen's Association <a href="https://kycattle.org">https://kycattle.org</a>

Governor's Office of Agricultural Policy <a href="https://agpolicy.ky.gov/funds/pages/default.aspx">https://agpolicy.ky.gov/funds/pages/default.aspx</a>

American Forage and Grassland Council <a href="https://www.afgc.org">https://www.afgc.org</a>

Gallagher Power Fence Manual

https://www.gallagher.eu/media/wysiwyg/Powerfence manual basic fencing .pdf



### Special Thanks

### 2022 Kentucky Grazing Calendar

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This edition of the Kentucky Grazing Calendar is intended to assist forage livestock producers in developing a year-round holistic system that is profitable, sustainable and environmentally sound. The editors wish to acknowledge the Tennessee Grazing Coalition and the Virginia Cooperative Extension whose similar efforts helped to both inspire and inform this effort. Finally a special thanks is extended to Gallagher North America for their generous support in the printing of this publication.





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Kentucky Master Grazer Educational Program









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