

**SPRING IS BETTER THAN  
SUMMER BUT FALL IS  
BEST OF ALL**

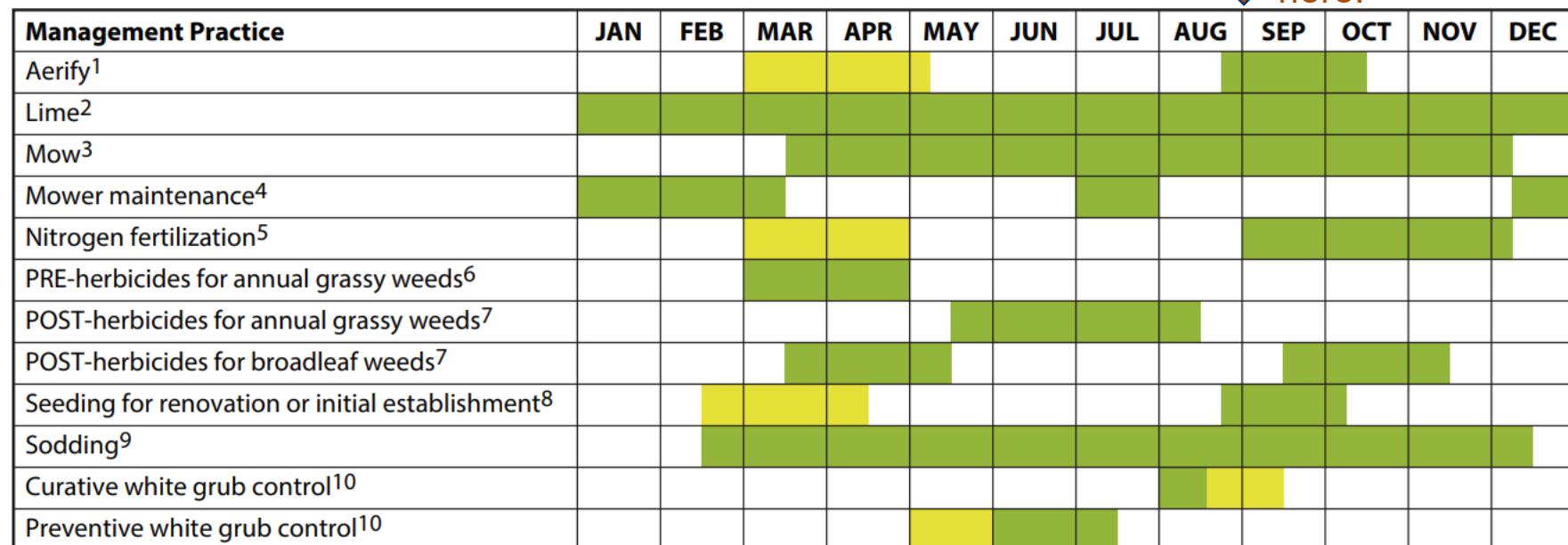
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DEPARTMENT OF PLANT AND SOIL SCIENCES

# START YOUR LAWN CARE CALENDAR IN THE FALL!

AGR-55

## Turf Care Calendar for Cool-Season Lawns in Kentucky

Gregg C. Munshaw, Plant and Soil Sciences



**Note:** Cool-season lawns include Kentucky bluegrass, tall fescue, fine fescues, and perennial ryegrass.



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



Commence lawn care season  
here!

- Best time to perform activity
- Second-best time to perform activity
- Do not perform activity

# FALL LAWN RENOVATION

# SHOULD I RENOVATE MY LAWN?

- 50% OR MORE UNDESIRABLE TURF
- WANT CONVERT TO NEW IMPROVED VARIETIES
- CHANGE OF GRASS SPECIES GROWN
- DIFFICULT TO CONTROL WEEDS DOMINATING THE LAWN
  - & Selective weed control limited
- INCREASE UNIFORMITY OF LAWN
- INCREASE PROPERTY VALUE
- TRY YOUR BACKYARD FIRST



# A LONG SUMMER HAS MANY LAWNS LOOKING ROUGH

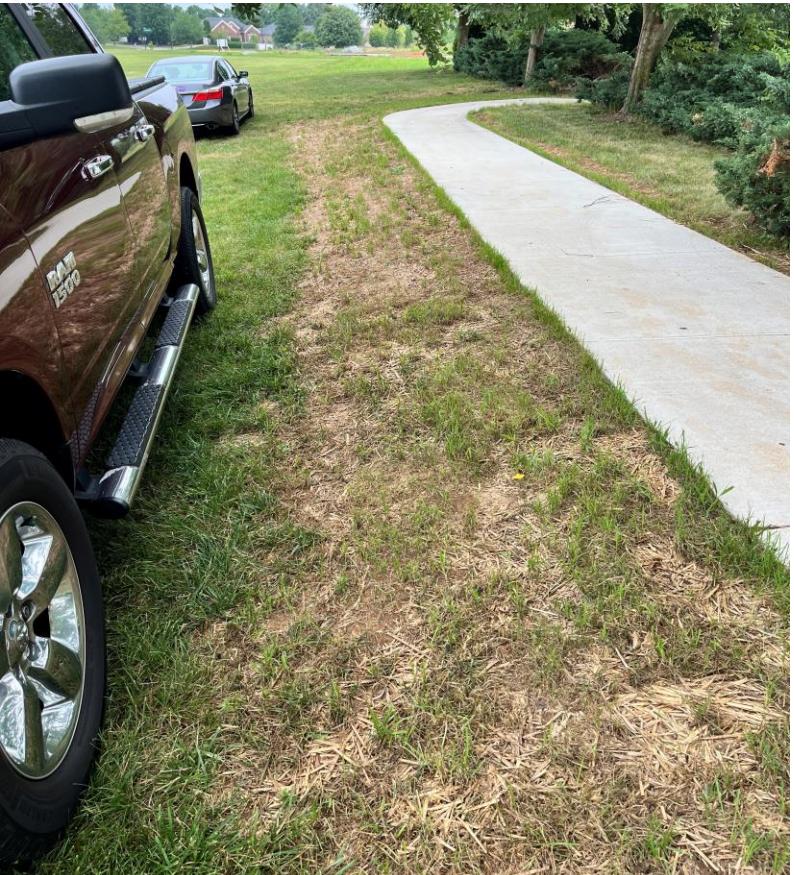


Photo taken September 16<sup>th</sup>, 2025 University of Kentucky

# WHEN SHOULD I RENOVATE MY LAWN?

FALL	SPRING
SOIL TEMPS WARM	SOIL TEMP SLOW
TWO COOL PERIODS BEFORE HEAT STRESS	ONLY ONE COOL PERIOD OF GROWTH BEFORE SUMMER
REDUCED WEED PRESSURE	GRASSY WEEDS PROBLEMATIC
DAYS GETTING SHORTER	DAYS GETTING LONGER

# SPRING SEEDING FAILURE



Seed planted in April 2025, photos taken end of July 2025

# NO-TILL RENOVATION

PREFERRED WHENEVER POSSIBLE

# ELIMINATE COMPLETION FROM EXISTING VEGETATION

- Spray a non-selective herbicide such as glyphosate
- Wait approximately 7 days to allow peak control of weeds
- Scalp lawn with mower
- Remove any large piles of debris
- Make second application of non-selective herbicide as needed



# PREPARE SEED BED

- Aerification with several passes will help alleviate compaction and prepare a seedbed
- Use knife test to see if needed, can you push a knife into the soil with just the weight of your thumb?



# POWER SEEDING

- Dethatchers can be used to thin the canopy of dead sod and break up aerification plugs
- Power seeders/Slit Seeders plant the seed with good seed to soil contact
- Seed in at least two directions
- You have done all the hard work now!



# WHAT TYPE OF GRASS SHOULD I PLANT?

# PERENNIAL RYEGRASS

- C3 bunch type
- A very shiny dark green grass that can withstand low mowing heights
- Well suited for overseeding bermudgrass sports fields in cold months
- Very fast germination
- Extremely disease susceptibility
- Low heat and drought tolerance
- Often dies in summer in KY



# FINE FESCUES

- C3 bunch type
- Low input, shade tolerant, drought tolerant turfgrass
- Can look very pretty in the spring with sufficient rainfall
- Although it will survive drought it will go dormant and forms dense clumps in the lawn and is not competitive with other weeds
- KY summer heat is not conducive to fine fescues



# KENTUCKY BLUEGRASS

- C3 rhizomatous
- Very dense and fine leaf textured turfgrass
- Has rhizomes that promote recovery from damaged
- Will require supplemental irrigation to maintain color in the heat of KY summers and is prone to disease
- Thatch buildup can become a problem
- Cultivar choice important with this species



# TURF TYPE TALL FESCUE

- C3 bunch type
- The best suited broadly across the state
- Excellent heat and drought tolerance
- Moderate shade tolerance
- Turf Types have a much finer blade than 'KY-31'
- No thatch build up
- Is susceptible to brown patch disease
- Is a bunch type grass without with slow lateral spread



# WARM SEASON GRASSES (C4) NOT IN FALL!



**Bermudagrass** - suited for zone 7+, new varieties with fine leaf texture and improved cold hardiness. It recovers quickly from damage and requires very little water and grows well in heat

- Bermuda has potential for winter kill, spreads quickly in landscape beds, and goes dormant from first killing frost to April

**Zoysiagrass** - suited for zone 6+, it has better cold tolerance than bermudagrass and has a very slow growth rate. It is not as drought tolerant as bermudagrass.

Both are C4, rhizomatous and stoloniferous

**Establishment** –late spring to early summer.

# BUYING GRASS SEED

# DON'T SKIMP HERE

- You usually get what you pay for with grass seed
- You have gone through the effort of preparing for the seed, don't plant cheap seed containing weeds
- Do your research and take the time and effort to track down quality seed
- Use NTEP trial data and University recommendations

## 2018 Tall Fescue - 2019-23 - QUALITY RATINGS

\* Top performing statistical group: green

Export To CSV

Link to your query: <https://maps.umn.edu/ntep/dev/?queryid=voyghwtacumulok>

NTEP Entry Name	Table avg	Fresno, CA	Storrs, CT	Newark, DE	Griffin, GA	Ames, IA	Ames Traffic, IA	Ames Shade, IA	West Lafayette, IN	Manhattan, KS	♦Lexington, KY♦
CV	1.3	22.2	3.4	3.5	2.7	1.7	2.3	10.2	4.6	9.7	2.8
LSD	0.1	1.8	0.3	0.4	0.3	0.2	0.2	0.9	0.4	0.7	0.3
PPG-TF 312	6.0	5.0	6.6	7.1	6.7	6.4	6.3	5.6	6.1	4.2	6.4
PPG-TF 231	6.1	4.8	6.6	6.5	6.6	6.6	6.3	6.2	5.9	3.7	6.4
RAPTOR LS	6.2	3.6	6.6	7.0	7.1	6.5	6.4	5.9	6.3	4.8	6.4
CAPITAN	6.3	5.5	6.5	7.0	7.0	6.5	6.3	6.0	6.4	4.9	6.4
DLFPS-321/3695	6.1	4.8	6.5	6.9	7.0	6.5	6.4	5.3	6.0	4.1	6.4

## Tall fescue

Both recommended and promising varieties can be used in the VCIA Sod Certification program.

### Category I – Recommended tall fescue varieties (90–100% on a weight basis).

4th Millennium SRP, Annapolis, Avenger II<sup>4</sup>, Avenger III, Birmingham<sup>1</sup>, Black Tail, Bloodhound<sup>4</sup>, Bullseye<sup>1</sup>, Bullseye LTZ, Catalyst, Crossfire 4, Daybreak, Degas, Dragster, Dynamite G-LS, Fantasia, Fastlane, Fayette, Firebird 2, Firecracker G-LS, Firecracker SLS, Firehawk SLT, Firenza II, Firewall<sup>4</sup>, Gazelle II<sup>4</sup>, Gold Medallion<sup>4</sup>, Grande 3, GTO, Guardian 4<sup>1</sup>, Hemi, Houndog 8<sup>4</sup>, Inferno<sup>4</sup>, Integrity<sup>4</sup>, Justice<sup>4</sup>, Lifeguard, Maestro, Michelangelo, Monument, Moondance GLX, Mustang 4<sup>4</sup>, Paramount, Penn RK4<sup>4</sup>, Pro Gold, Raptor III, Rebel IV<sup>4</sup>, Rebel V<sup>4</sup>, Rebel XLR<sup>4</sup>, Rebounder<sup>4</sup>, Reflection, Regenerate, Rendition RX<sup>4</sup>, Rockwell, Rowdy<sup>4</sup>, Saltillo<sup>4</sup>, Screamer LS, Serenade, Spyder LS<sup>4</sup>, Spyder 2LS, SR 8650, Standout<sup>4</sup>, Stealth, Sunset Gold<sup>4</sup>, Supersonic, Symphony, Technique.

# HOW MUCH SEED DO I NEED?

Seed Type	Approximate Lawn Seeding Rate (Pure Live Seed)
Turf Type Tall Fescue	6lbs/1000sqft
Kentucky Bluegrass	2lbs/1000sqft
Zoysia	2lbs/1000sqft
Bermudagrass	2lbs/1000sqft

# FALL FERTILITY AND WEED MANAGEMENT

# FOUR MAIN FACTORS RESPONSIBLE FOR GROWTH OF GRASS



Light, Water, Temperature, & Soil Fertility

# SAMPLING DEPTH MATTERS

Depth	Mehlich-3 Phosphorus
Inches	ppm
0-1	205
0-2	138
0-3	74



# INTERPRETING YOUR SOIL TEST

- If soil test says levels are sufficient they are
- If your grass looks good and your soil test says levels are low then your test is wrong
- If your grass looks bad and the soil test says levels are too low, it is possible it is a nutrient deficiency

CO NUM: 00664, CROP: Creeping Bentgrass

**Hancock Cooperative Extension Office**  
1605 US Highway 60 West  
Hawesville  
(270) 927-6618

REPORT TYPE: H

LAB NUM: SL-24-28970

CO NUM: 00664

ACRES: 1



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## Soil Test Report

8/23/2024

Evan Tate

Extension Agent for Ag and Natural Resources

OWNER SAMPLE ID: #5 green

### HOME LAWN AND GARDEN CROP INFORMATION:

.... CROP: Creeping Bentgrass .... MANAGEMENT: New Lawn .... Sunny Location 7+ hrs. .... Golf Green

all green samples are within an acre

Determination	Result	V Low	Low	Med	High	V High	Recommendation
Soil pH	6.9						None
Nitrogen							1.0 to 1.5 lb N/1000 sq ft
Phosphorus	67 lbs/acre						None
Potassium	71 lbs/acre						1 to 3 lb K2O/1000 sq ft
Calcium	2003 lbs/acre						
Magnesium	331 lbs/acre						None
Zinc	14.4 lbs/acre						None
Cation Exchange Capacity	7 meq/100g	Below normal for KY which is 11 to 19 meq/100g					
Cation Saturation	>>>>	1% K, 69% Ca, 19% Mg, 89% total bases					

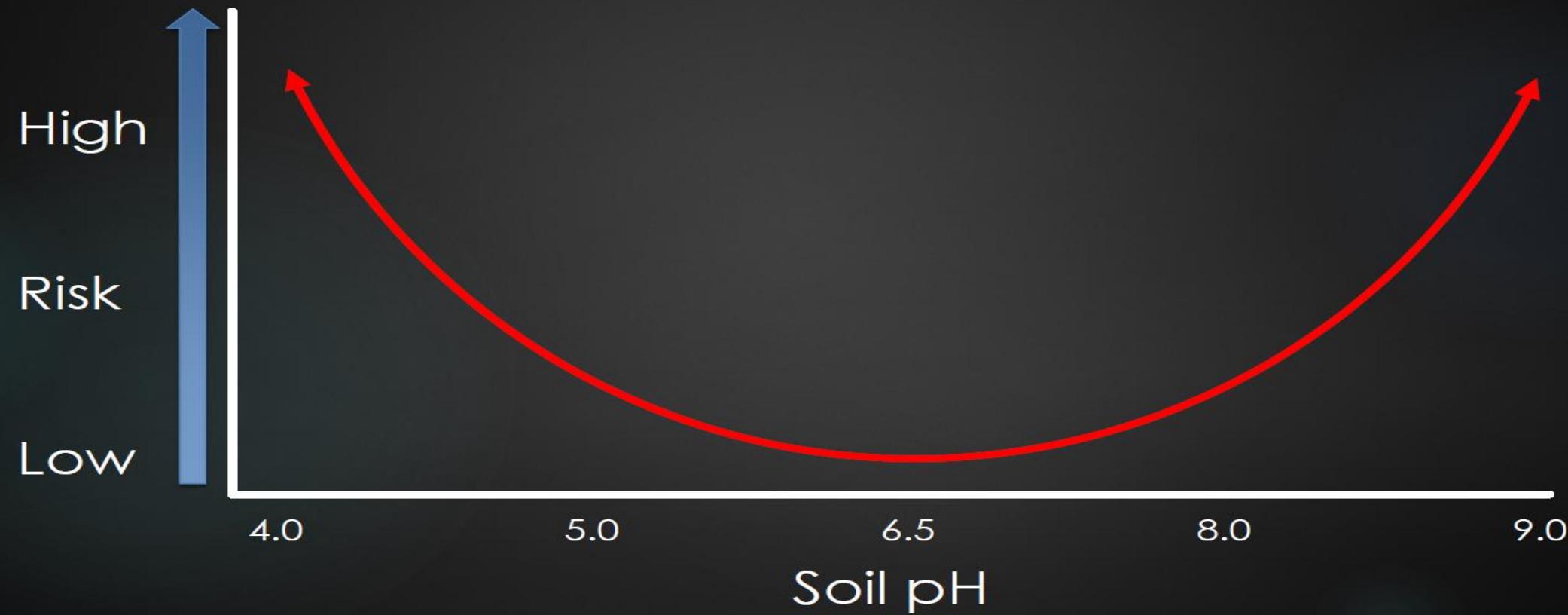
### Soil pH Recommendation:

pH is adequate, no lime needed

### Comments:

Levels denote probabilities for a crop response to fertilizer or lime. Very Low or Low denotes high probability; Medium denotes slight probability; High or Very High denotes minimal probability. Amount of fertilizer needed depends on concentration of nutrients in fertilizer. Soil pH is calculated from 1 M KCl soil pH using:  $0.91 \times 1 \text{ M KCl soil pH} + 1.34$ . Sikora-2 buffer pH of 7.4 was used

# Risk of Soil pH Affecting Turfgrass Performance



UK tested 65,000 soil samples from turf since 1990 and only 22 had a pH above 8.5

# GRASS GROWING ON SOIL WITH PH OF 5.1



Zoysiagrass on fairway at Ft. Mitchell Country Club

# WHAT ABOUT NITROGEN?

- USUALLY THE MOST LIMITING NUTRIENT FOR GRASSES
- 1-4 LBS OF ACTUAL N/1000SQFT ANNUALLY
- APPLY IN THE FALL TO PROMOTE ROOT GROWTH AND NOT PROMOTE WARM SEASON WEEDS LIKE CRABGRASS
- DO NOT APPLY SLOW RELEASE N SOURCES LATE IN THE YEAR

**Table 1.** Nutrient content of common soluble and slow-release N sources

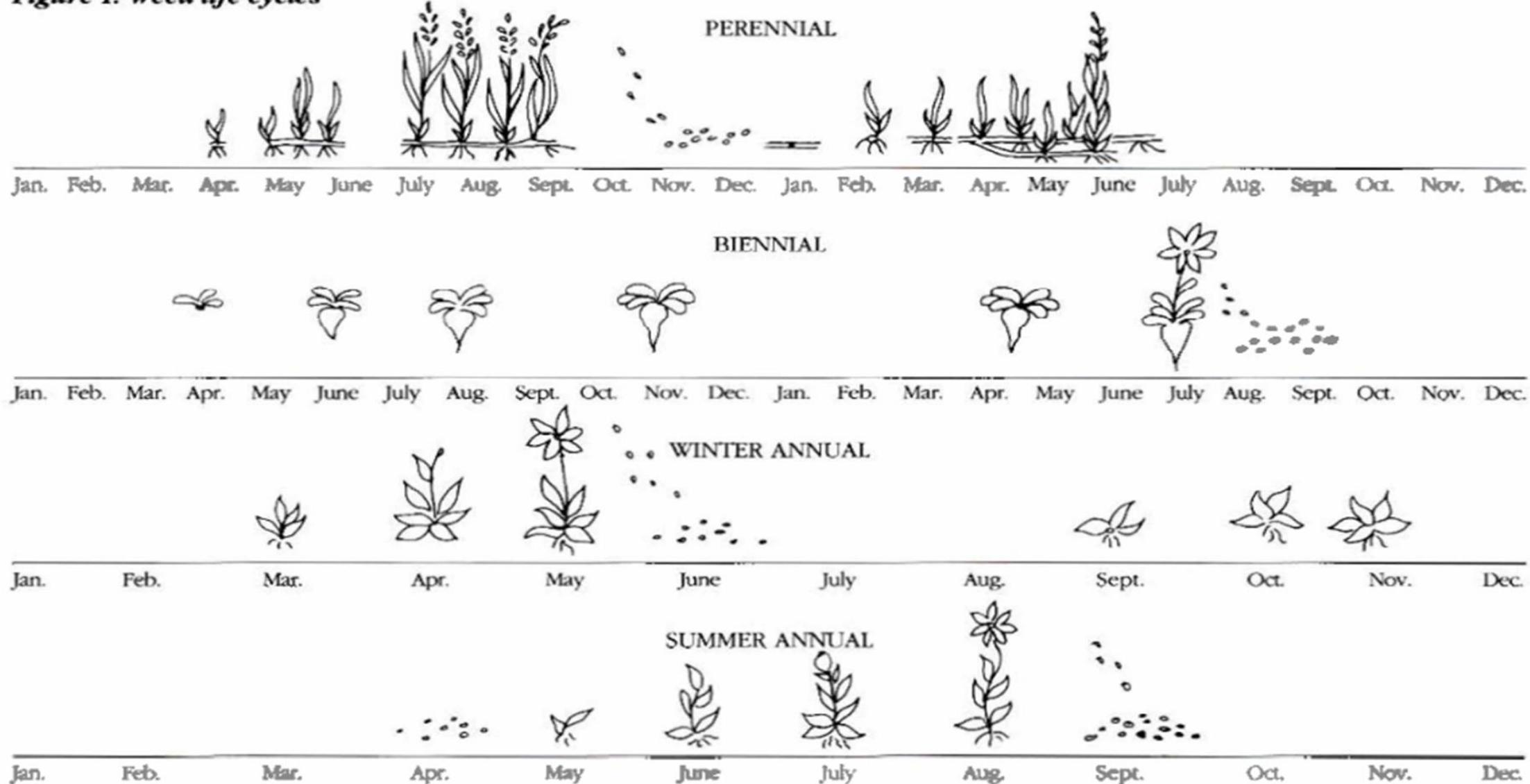
N Source	Guaranteed Analysis	Other Elements
Quick-Release		
Ammonium Nitrate	34-0-0	
Ammonium Sulfate	21-0-0	24% S
Diammonium phosphate (DAP)	18-46-0	
Monoammonium phosphate (MAP)	10-50-0	
Calcium Nitrate	15-0-0	20% Ca
Potassium Nitrate	13-0-44	
Sodium Nitrate	16-0-0	
Urea	46-0-0	
Slow-Release		
Sulfur-coated Urea	Variable	5-20% S
Polymer-coated Urea	Variable	
Ureaformaldehyde	38-0-0	
Methylene Urea	40-0-0	
Isobutylidene diurea (IBDU)	31-0-0	
Biosolids	Variable	Various

Adapted from Carrow et al. 200.

# MAINTAIN A DENSE LAWN TO OUT COMPETE WEEDS AND OUTGROW DAMAGE



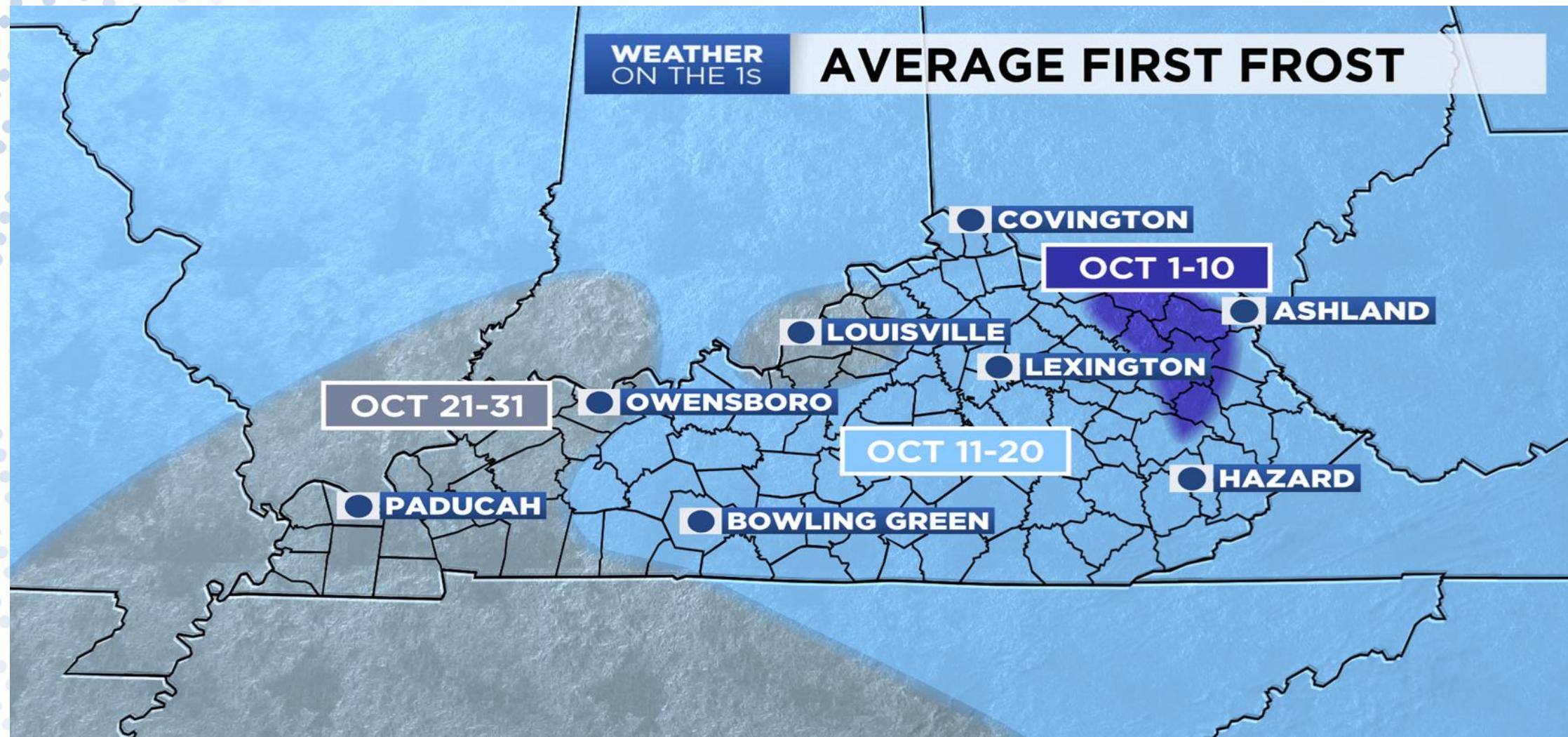
Figure 1. Weed life cycles



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# APPLICATIONS CAN START AFTER FIRST FROST FOR MOST BROADLEAVES



Wait for winter annuals to emerge for post emergent applications

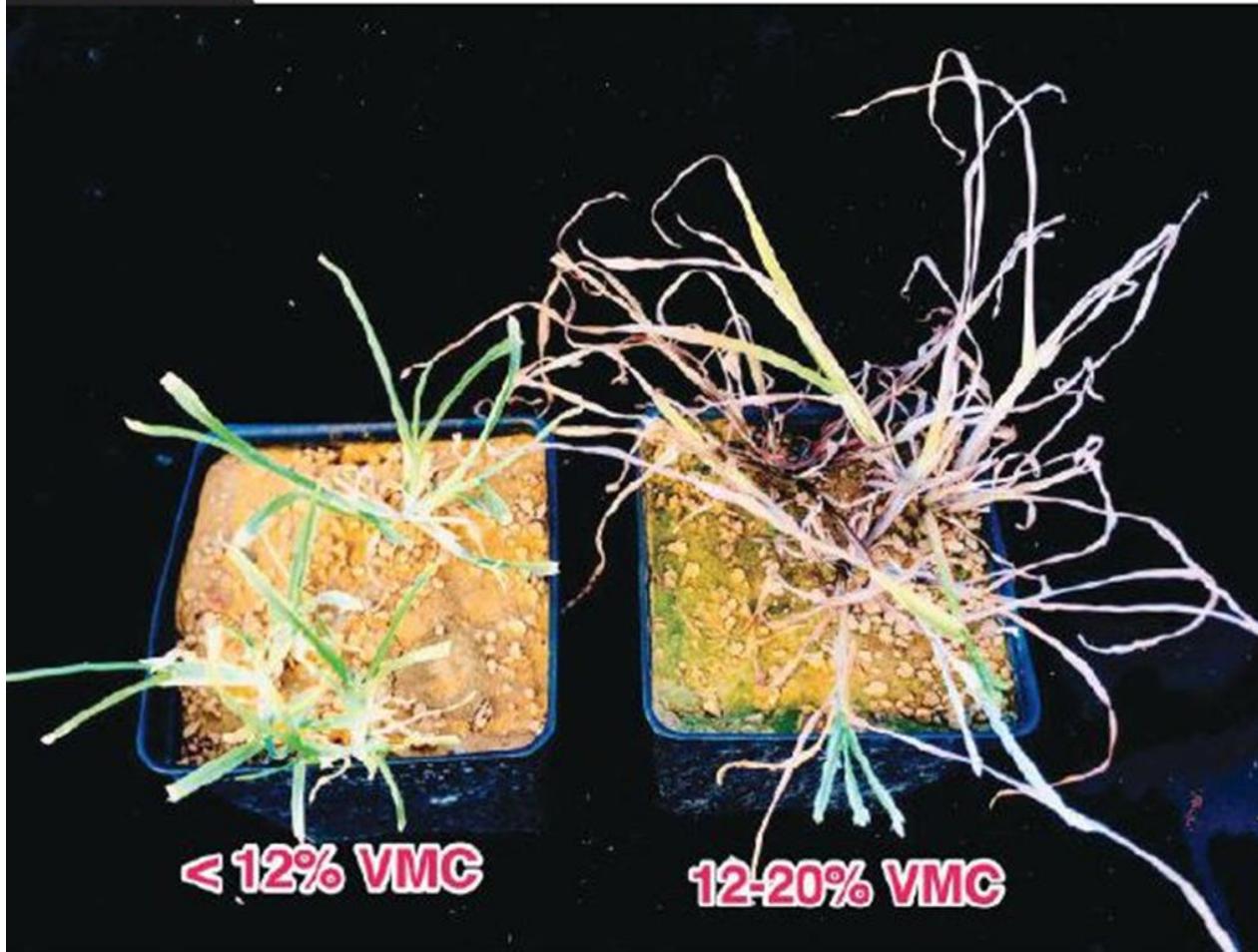
# THREE-WAY HERBICIDE BEST BROAD SPECTRUM FOR BROADLEAVES

- SINGLE ACTIVE INGREDIENTS DON'T WORK AS WELL ON BROAD SPECTRUM OF WEEDS
- 2,4-D GREAT ON DANDELION BUT NOT ON WHITE CLOVER
- 2,4-D + MCPP + DICAMBA IS A VERY COMMON MIXTURE
- USE TRICLOPYR FOR WILD VIOLETS AND GROUND IVY
- BEST APPLIED IN THE FALL, A SPRING APPLICATION MAY BE HELPFUL FOLLOWING THE FALL TO GET HARD TO KILL WEEDS OR MISSED WEEDS



# ENSURE SOIL MOISTURE BEFORE APPLY HERBICIES

FIGURE 4



# WHAT SHOULD I DO IN THE SPRING AND SUMMER TO MY LAWN?

SPRING	SUMMER
PRE-EMERGENCE HERBICIDES FOR C4 GRASSY WEEDS	LIGHT FERTILIZATION
LIGHT FERTILIZATION	IRRIGATION
SODDING	WHITE GRUB PREVENTATIVE
PLANT WARM SEASON GRASSES	PLANT WARM SEASON GRASSES

# UPCOMING TURF EVENTS

- **11-25-25 FULL DAY HERBICIDE WORKSHOP MRTF/UK AT BOONE COUNTY EXTENSION OFFICE**  
**\*REGISTER AT MRTF.ORG**
- **2/17-2/19/2026 49<sup>TH</sup> ANNUAL TURF AND LANDSCAPE SHORT COURSE**  
**\*REGISTER AT KYHORTCOUNCIL.ORG**



# QUESTIONS?