

# Restarting Your Lawn After the Drought



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“ We can grow all grasses equally poor in the transition zone” Dr. A.J. Powell

“Most American lawns become hopelessly deteriorated within five or six years in spite of better care than English lawns” – Piper & Oakley Turf for Golf Courses 1917



# Determine your Desires

- Maintain the lawn in a way to meet your desired use the maximum amount of days per year.
- Low input----- High input



# Manage the Growth of the Grass



4 factors that control turfgrass growth Light, Temperature, Water, Nitrogen (Micah Woods- "Grammar of Greenkeeping")

# Uncontrollable Factors



We cannot easily control light or temperature so focus on what we can do to restart our lawns

# Uncontrollable factors?



Kansas City Chiefs stadium with artificial lights and growth blankets influencing light and temperature

# Controllable Factors



When recovering from drought we can more easily control two factors: Water and Nitrogen

# When to Water during a drought: Two options

- To prevent plant death



- To maintain color and vigor



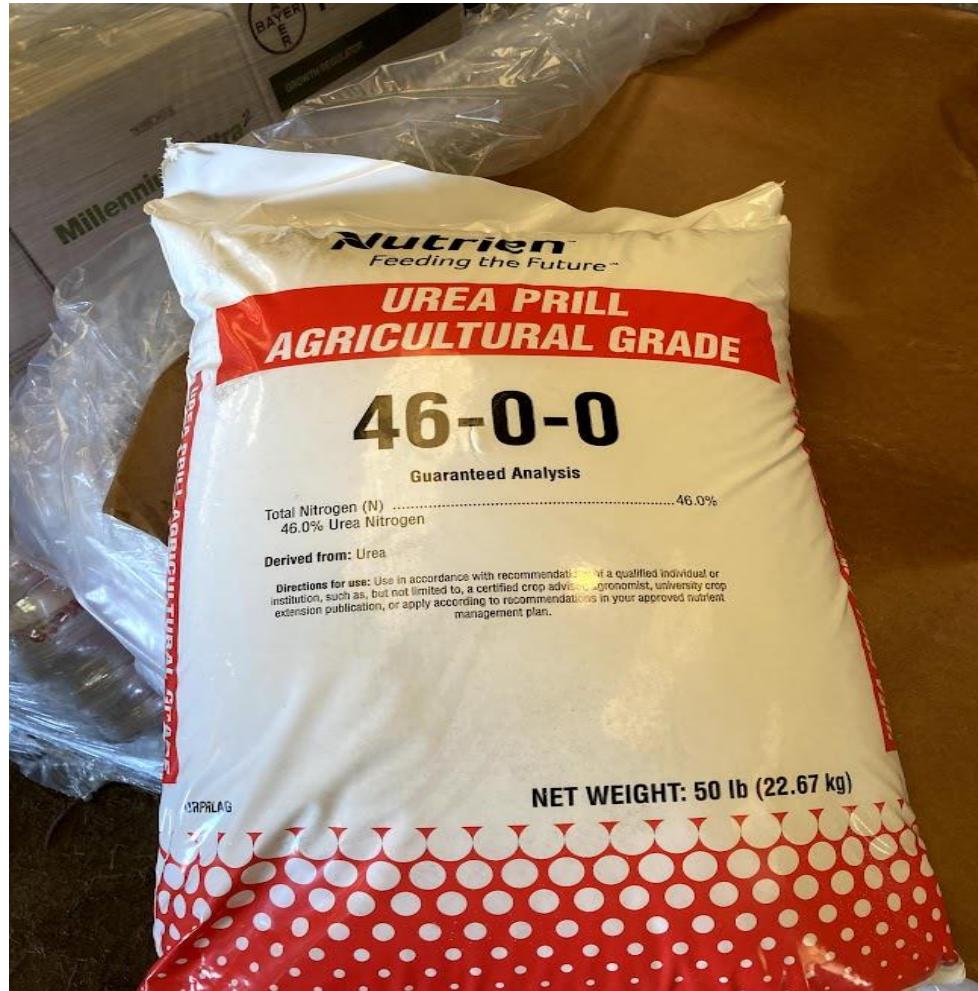
Both lawns will live but have two very different appearances and usability. KY very rarely goes 30 days without rain. (Sept. 2019) Water for recovery.

# Reducing Damage from the Drought



Minimize traffic from mowers, vehicles, and even foot traffic during prolong periods of drought. This will help dormant grass recover

# Fertilize with Nitrogen



Do not fertilize dormant turfgrass. Nitrogen will promote recovery of grass after adequate water is supplied.

# Tips for Fertilizing

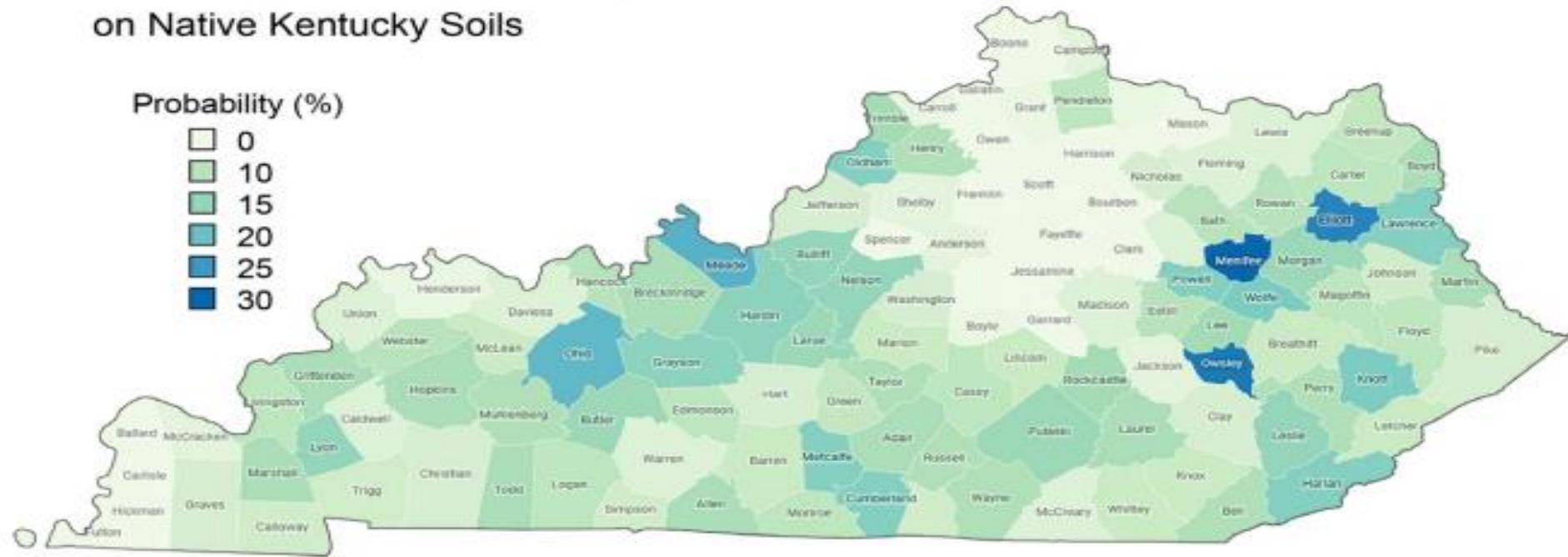
- Don't guess soil test, but Nitrogen not on test
- Apply in small doses you can always add more but can't take away
- Avoid burn by watering immediately
- If the grass is growing fast enough you don't need more



Fertilizer burn from spilling product

# Why only Nitrogen?

# Probability of Observing a Turfgrass Response to Applied Phosphorus on Native Kentucky Soils



**Figure 1.** Probability of turfgrass responding to applied phosphorus on Kentucky soils

Native soils in KY have abundant Potassium and Phosphorus you likely would see no benefit in applying P or K (See AGR-244 and 249)

# Do Not Use “Starter” Fertilizers



**Horticulture  
Webinar  
Wednesdays**

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

**STARTER FERTILIZER &  
LAWN ESTABLISHMENT**

**March 10, 2021**  
12:30 pm EST/11:30 a.m. CST

Register at this link:  
<https://tinyurl.com/UKYHortWebWed21>

*visit kentuckyhortnews.com*

Watch Dr. Bradd Lee's talk about starter fertilizers from last year

# Post Drought Renovation



July 7<sup>th</sup> 2022



July 28<sup>th</sup> 2022 good recovery from rain

# Sometimes Rain is a Day late and a Dollar Short



July 7<sup>th</sup> 2022

July 28<sup>th</sup> 2022

# Consider Seeding

- If less than 50% of the stand is desirable turfgrass, consider overseeding or establishing a new lawn.
- Water and Nitrogen won't likely be enough to restart some areas after the drought.



# Species Selection



- It isn't all bad news. Renovating your lawn gives you a chance to use improved turfgrass varieties.

# Turf Type Tall Fescue for Kentucky Lawns

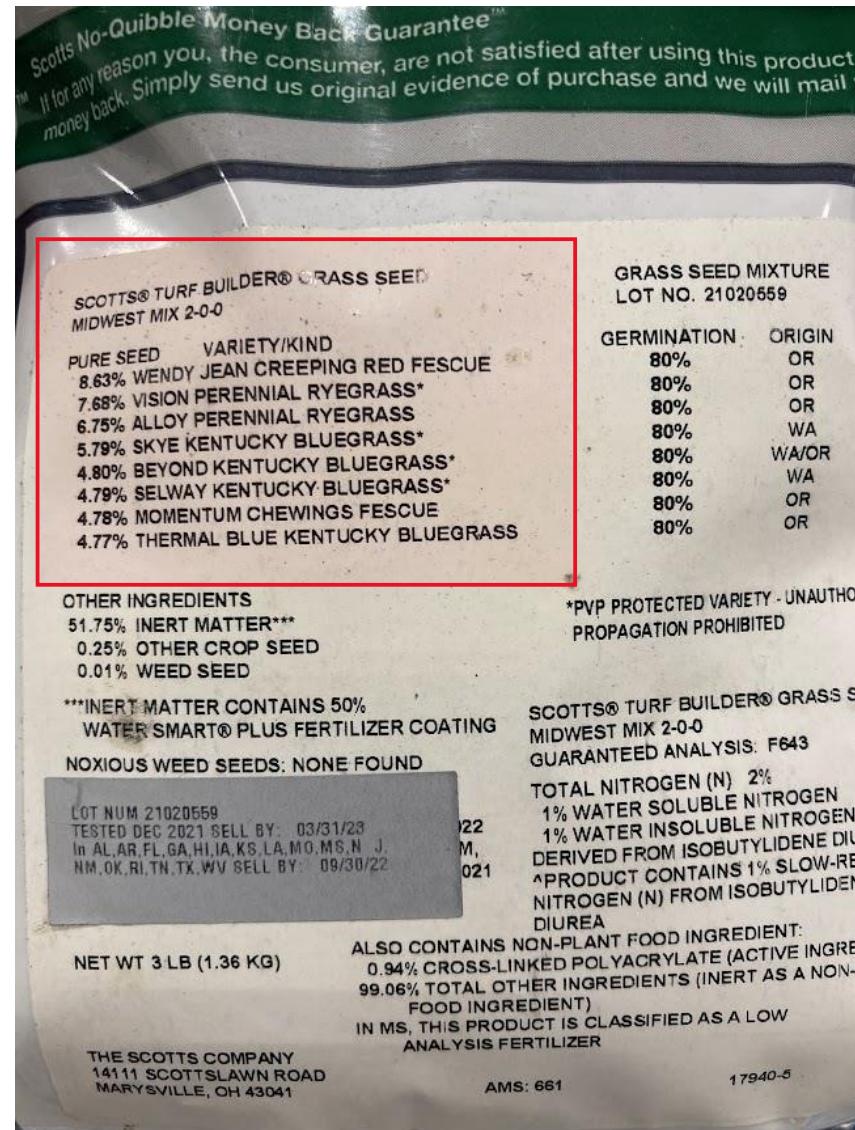


Turf Type Tall Fescue is generally the best grass for a lawn in Kentucky. New varieties improve every year

# TTTF More Drought Resistant Than Bluegrass



# Buying Seed



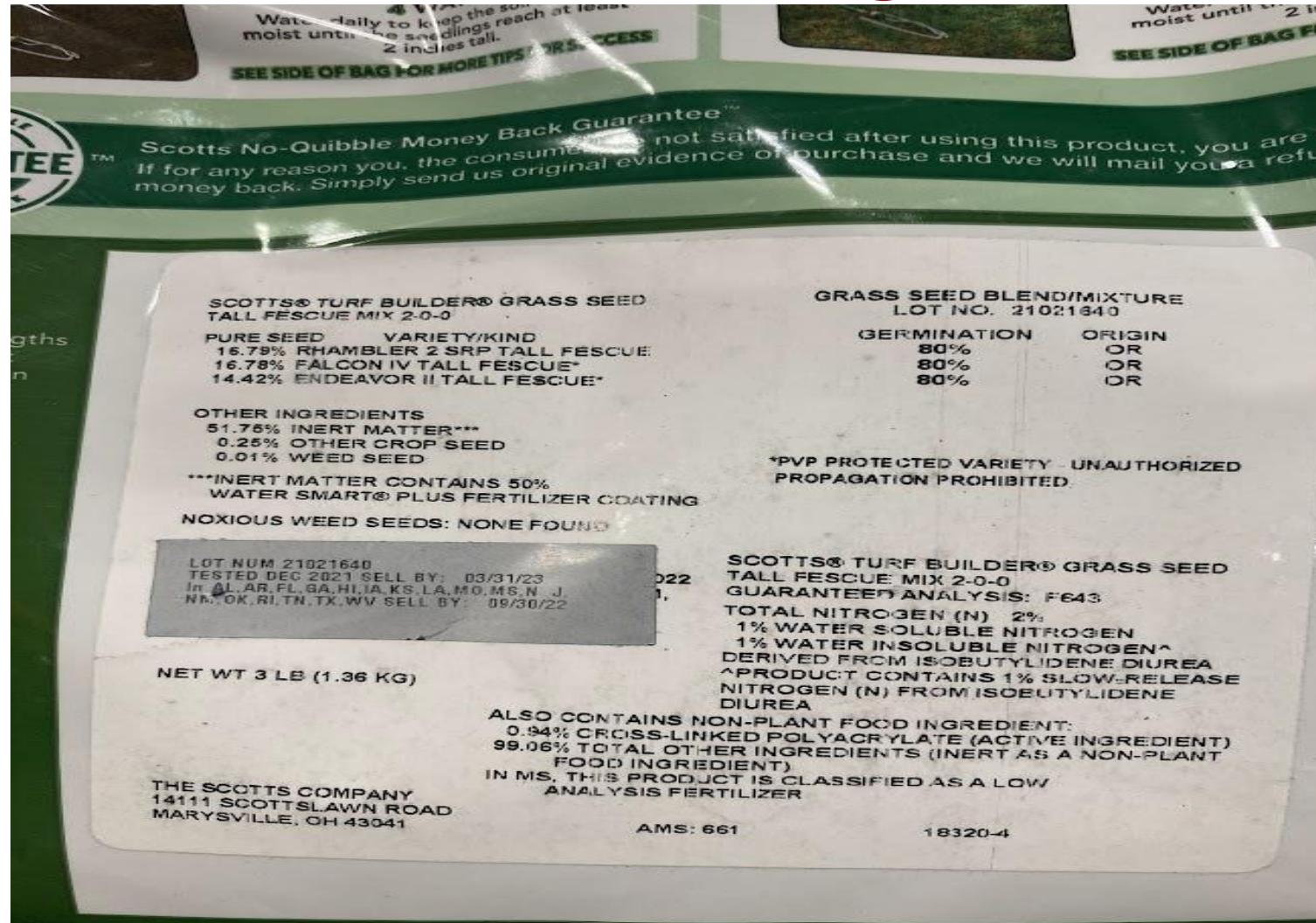
- Always read the product label to see that it is the variety you want.

# How Much Seed Do I Need

| Seed Type             | Approximate Lawn Seeding Rate |
|-----------------------|-------------------------------|
| Turf Type Tall Fescue | 6lbs/1000sqft                 |
| Kentucky Bluegrass    | 2lbs/1000sqft                 |
| Zoysia                | 2lbs/1000sqft                 |
| Bermudagrass          | 2lbs/1000sqft                 |

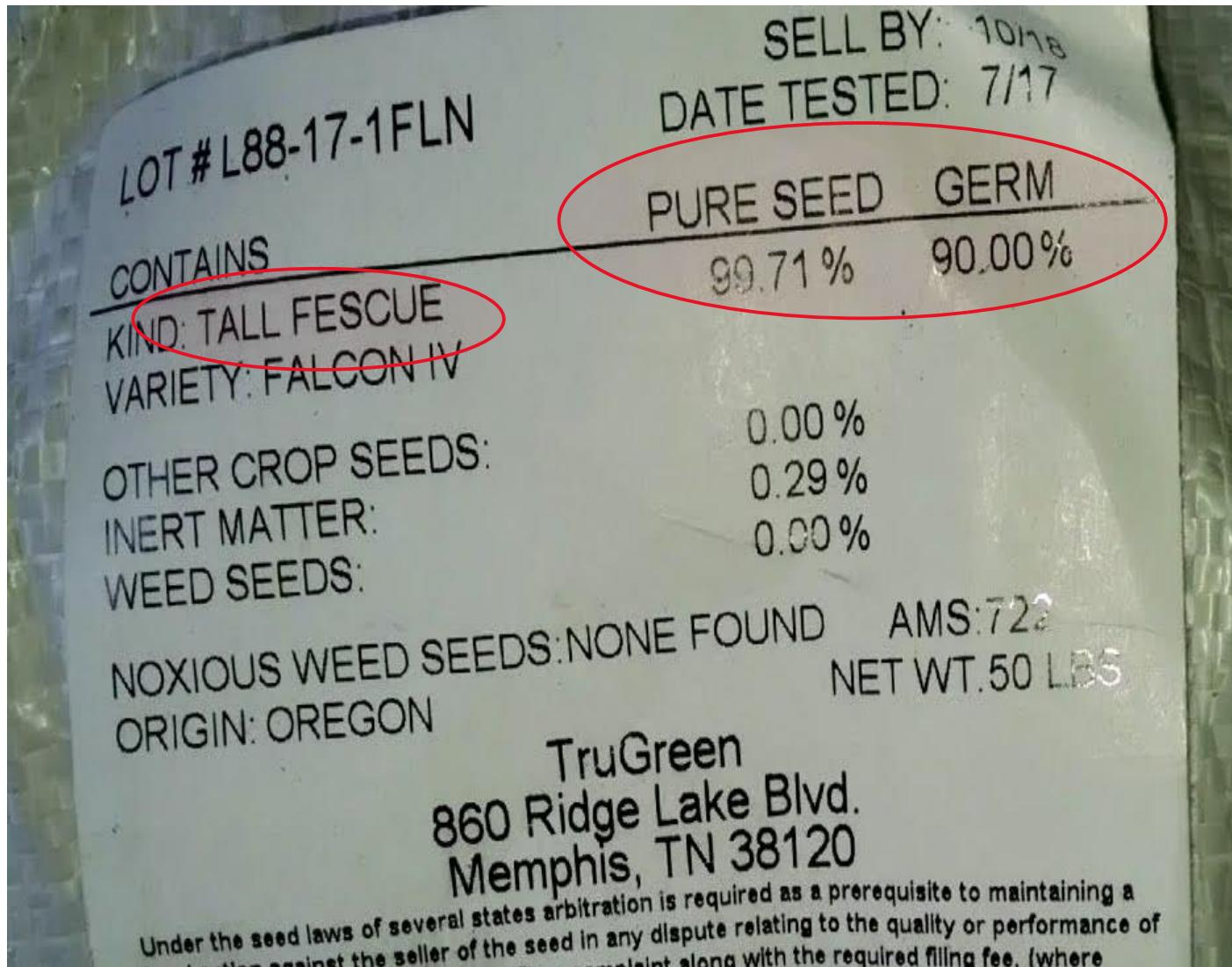
These are rates for Pure Live Seed (PLS)

# What is in a Bag?



Half of this bag is inert matter (seed coating). Calculate the PLS to know how much to buy.

# Calculating Pure Live Seed



Tall Fescue seeding rate is 6lbs PLS per 1000sqft

$$\text{PLS} = 0.99 \times 0.9$$

$$\text{PLS} = 0.89$$

$$6\text{lbs} \div 0.89 = 6.7\text{lbs per 1000sqft}$$

This is a very pure seed. Most off the shelf seeds will have much more inert matter. This calculation can be found easily online.

- **PLS = % seed purity x % seed Germination**

# Seeding Methods



A dethatcher pulls thatch and places grooves in the soil. A slit seeder dethatches and seeds directly into the grooves. Small areas can just be raked by hand.

# When to Seed in Kentucky



The best time to seed in KY is September and Next September!

# Weed Control After the Drought



Crabgrass often becomes a problem during a drought.

# Spraying for weeds around seeding

**Table 4. Seeding/Overseeding/Sprigging Timing Chart<sup>1</sup>**

| Variety  | Before seeding <sup>2</sup> | At seeding | 7 days after emergence | 14 days after emergence | 28 days after emergence |
|--|-----------------------------|------------|------------------------|-------------------------|-------------------------|
| Annual bluegrass   | OK                          | OK         | OK                     | OK                      | OK                      |
| Annual ryegrass  | OK                          | OK         | OK                     | OK                      | OK                      |
| Buffalograss   | OK                          | OK         | OK                     | OK                      | OK                      |
| Common Bermudagrass <sup>3</sup><br>(for sprigging see footnote 3) | OK                          | OK         | OK                     | OK                      | OK                      |
| Creeping bentgrass   | OK                          | <b>NO</b>  | <b>NO</b>              | <b>NO</b>               | OK                      |
| Fine fescue (in blend)   | OK                          | <b>NO</b>  | <b>NO</b>              | <b>NO</b>               | OK                      |
| Hybrid Bermudagrass <sup>3</sup><br>(for sprigging see footnote 3) | OK                          | OK         | OK                     | OK                      | OK                      |
| Kentucky bluegrass   | OK                          | <b>NO</b>  | <b>NO</b>              | <b>NO</b>               | OK                      |
| Perennial ryegrass   | OK                          | OK         | <b>NO</b>              | <b>NO</b>               | OK                      |
| Seashore paspalum <sup>3,4</sup><br>(for sprigging see footnote 3) | <b>NO</b>                   | <b>NO</b>  | <b>NO</b>              | OK                      | OK                      |
| Tall fescue  | OK                          | OK         | OK                     | OK                      | OK                      |
| Zoysiagrass <sup>3</sup><br>(for sprigging see footnote 3)         | OK                          | OK         | OK                     | OK                      | OK                      |

**<sup>1</sup> NOTE:** No adjuvant or additive should be used when **Drive® XLR8 herbicide** applications are made on newly emerged turfgrass seedlings until 28 days after emergence. With the exception of seashore paspalum, a **Drive XLR8** application rate of 1.45 fl ozs/1000 sq ft (0.75 lb ae/A) can be made to all other turfgrass species in **Table 4**.

**<sup>2</sup> Drive XLR8** can be applied 7 days or greater prior to seeding.

**<sup>3</sup> Drive XLR8** can be used anytime prior to, at or after sprigging as indicated by turfgrass species in **Table 4**.

**<sup>4</sup> 0.75 fl oz to 1.45 fl ozs/1000 sq ft (0.37 to 0.75 lb ae/A)** application can be made at times indicated in **Table 4**.

Time **Drive XLR8** application around the seeding operations using the chart above as a reference point.

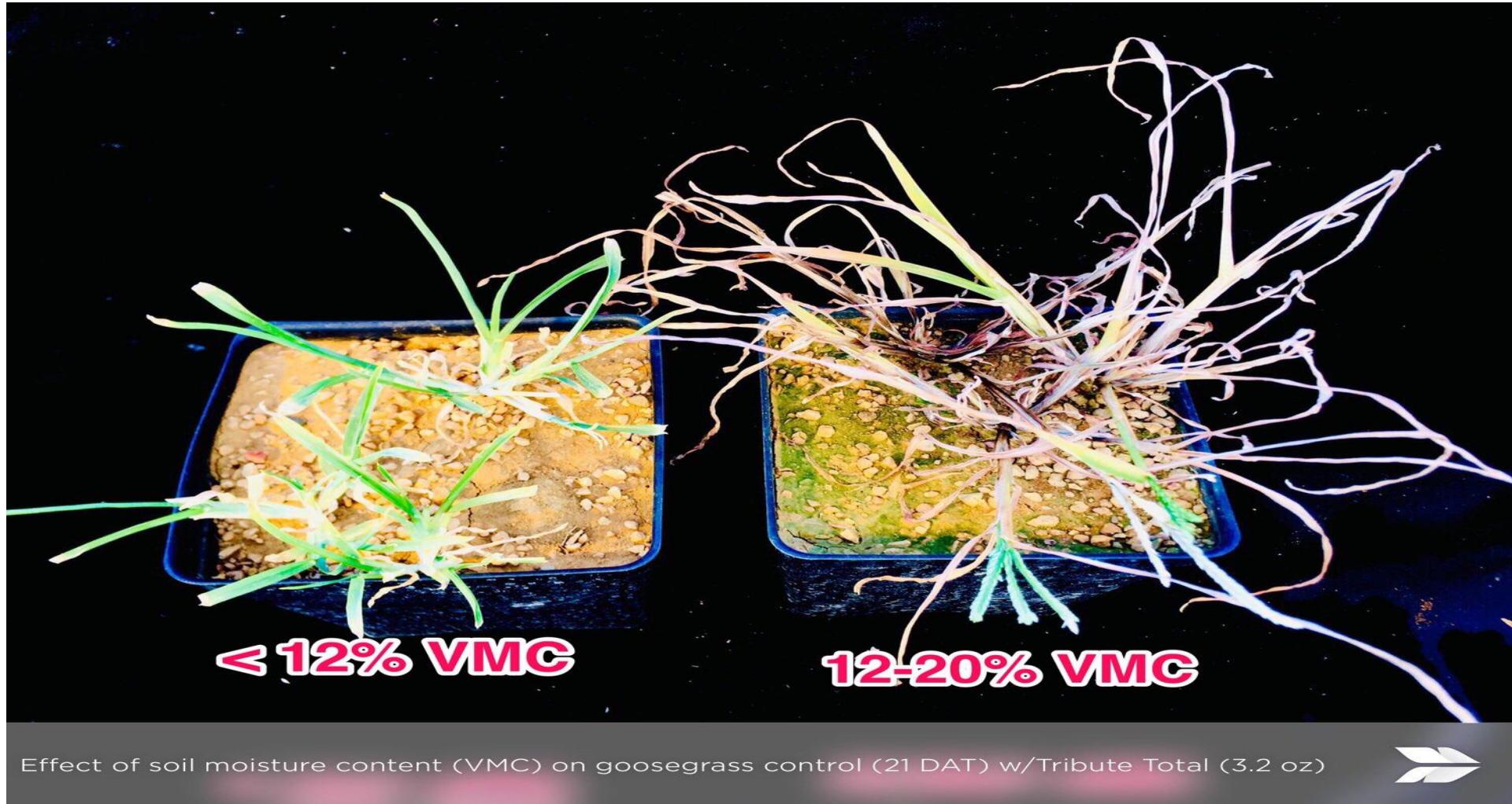
Avoid drift of spray mist to vegetables, flowers, ornamental plants, shrubs, trees and other desirable plants. Do not pour spray solutions near desirable plants. Do not use on Centipedegrass, St. Augustinegrass, Dichondragrass, nor on lawns or turf where desirable clovers are present. Avoid fine mists. Use lawn type sprayer with coarse spray as wind drift is less likely. Avoid contact with exposed feeder roots of ornamentals and trees. Maximum control of weeds will be obtained from spring or early fall applications when weeds are actively growing. Use the higher rate for hard-to-control weeds. Do not exceed specified dosages for any area; be particularly careful within the dripline of tree and other ornamental species. **Do not apply to newly seeded grasses until well established.** Do not use grass clippings from turf treated with this product for composting and/or mulch. Avoid broadcast applications when air temperature exceeds 90°F. When using small, spot treatment applications in temperature over 90°F, turf injury may occur.

When treating Carpetgrass and St. Augustine grass, avoid broadcast applications when air temperature exceeds 80°F. When air temperatures exceed 80°F, limit application to spot treatment only.

The suitable use of this product on non-recommended turf species may be determined by treating a small area at any rate/acre which does not exceed 3 pints/acre. The treated area should be observed for any sign of turf injury for a period of 30 days of normal growing conditions to determine the phytotoxicity and efficacy to the treated area.

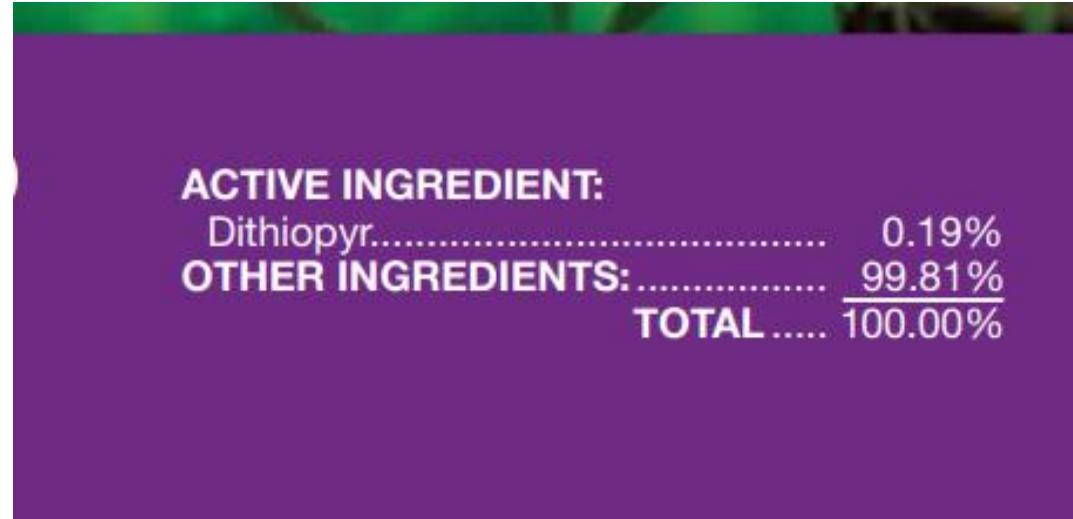
For optimum results: (1) avoid applying during excessively dry or hot periods unless irrigation is used; (2) turf should not be mowed 1 to 2 days before and following application; (3) **reseed no sooner than 3 to 4 weeks after application of this product.** Adding oil, wetting agent, or other surfactant to the spray may be used to increase effectiveness on weeds but doing so may reduce selectivity to turf resulting in turf damage. Clean and rinse spray equipment using soap or detergent and water, and rinse thoroughly before reuse for other sprays.

# Soil Moisture and Heat Restrictions



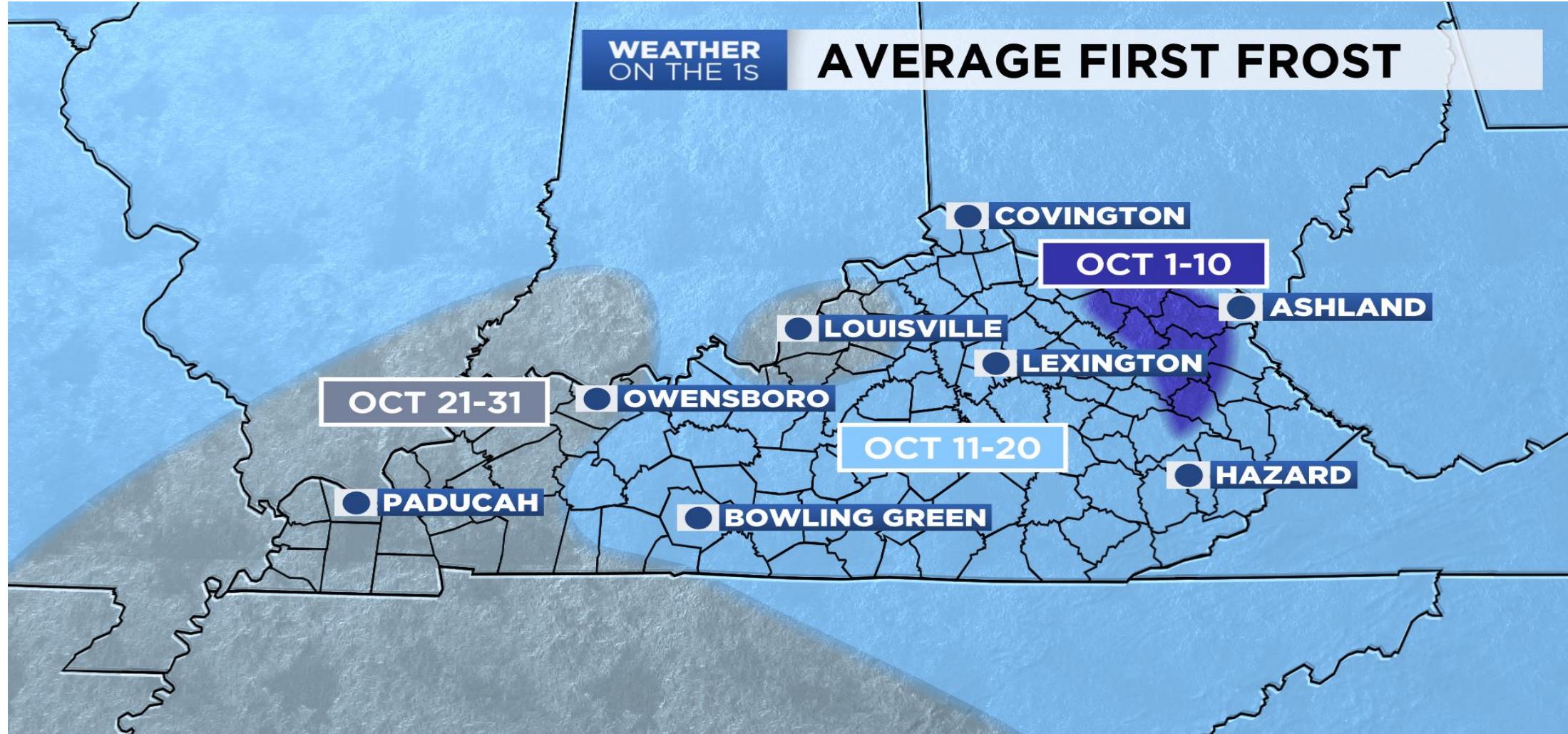
- You may be anxious to treat weeds but be sure to read label for heat restrictions and ensure enough soil moisture before treating

# No Pre-emergent Herbicides until Next Spring



Don't accidentally apply a pre-emergent herbicide before seeding this fall

# Best Time to Treat Broadleaf Weeds



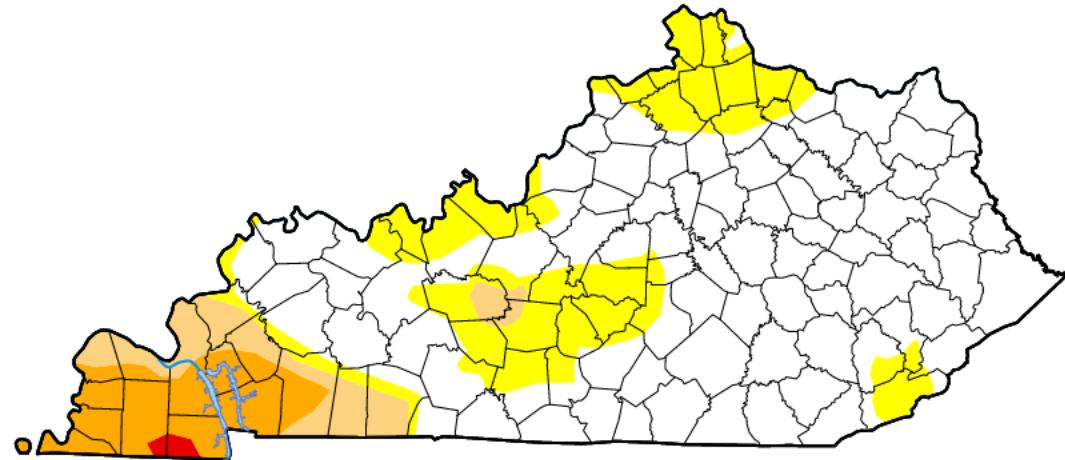
Spring is better than summer, but fall is best of all! Winter annuals and Perennials can be killed at once which eliminates the spring dandelion flush.

# Less traditional lawns, Western KY Option?

Map released: Thurs. July 28, 2022

Data valid: July 26, 2022 at 8 a.m. EDT

## Intensity



None

D0 (Abnormally Dry)

D1 (Moderate Drought)

D2 (Severe Drought)

D3 (Extreme Drought)

D4 (Exceptional Drought)

No Data

## Authors

United States and Puerto Rico Author(s):

[Curtis Riganti](#), National Drought Mitigation Center

Warm Season Grasses handle drought better

# Zoysia Grass



Cold tolerant - low input, less mowing but winter dormancy

# Bermudagrass



Not as cold tolerant (choose correct variety), but more drought resistant than zoysia

# Bluemuda



Danville Country Club

- Seeding Bluegrass into a stand of Bermuda grass. Is it an answer for the transition zone?
- This is not a recommendation for home lawns but possibly something we should consider.

# Questions?

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- @Kennethdclayton 

