

Welcome to our Zoom Webinar Series

Watering Wisdom: Growing a Healthy Lawn with Less Water

Part 3: Turfgrass Species for Low-Input Minnesota Lawns
The webinar will begin shortly



Future Webinars

- **Lawn Care Best Management Practices**

Tuesday, September 8, 2020 at 2:00 p.m.

- **Winterizing Your Lawn**

September 29, 2020 at 2:00 p.m.



Using Zoom

- Use Q&A to ask questions
 - Mouse over bottom of Zoom window to access Q&A
- Chat is disabled
- Live transcript can be turned off depending on device

Audio Settings ^

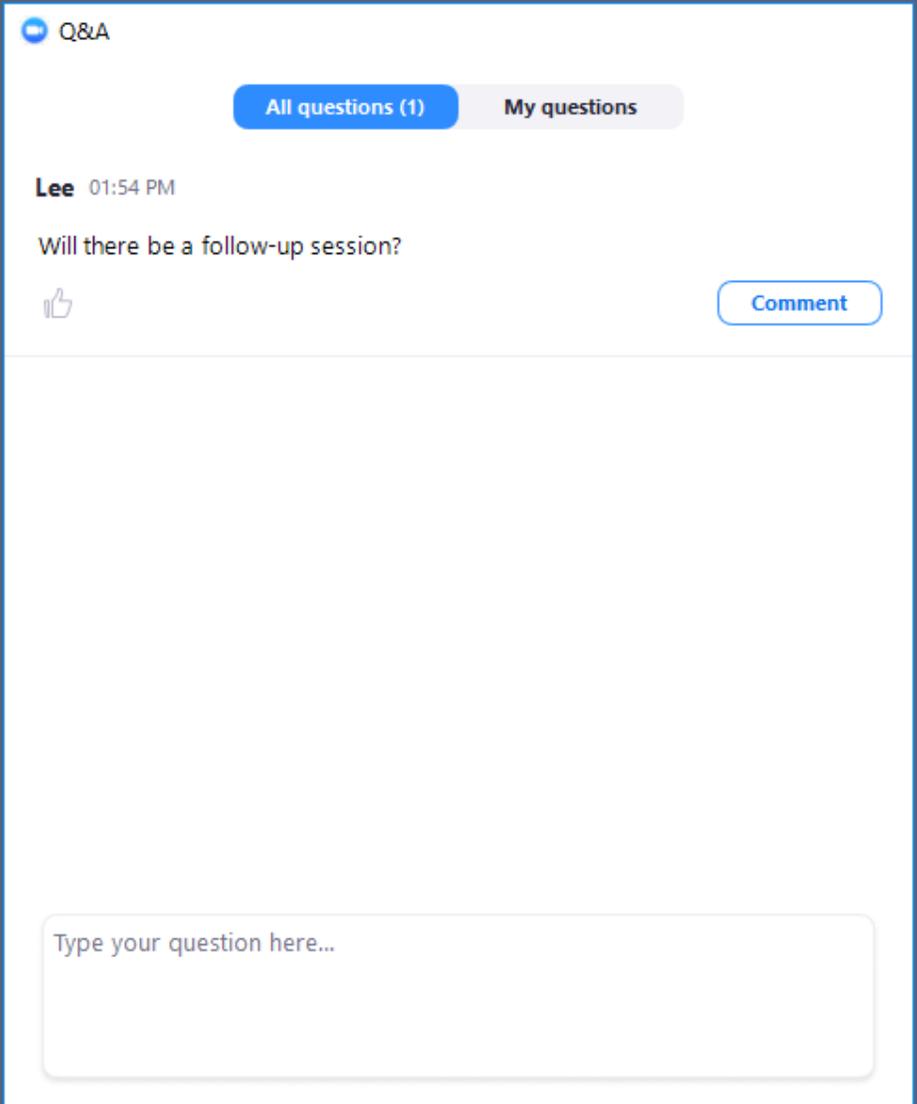


Chat



Q&A

Leave Meeting



The screenshot shows the Zoom Q&A interface. At the top, there is a 'Q&A' header with a minus sign. Below it are two tabs: 'All questions (1)' (active) and 'My questions'. A question from 'Lee' at 01:54 PM asks 'Will there be a follow-up session?'. Below the question is a thumbs-up icon and a 'Comment' button. At the bottom, there is a text input field with the placeholder 'Type your question here...'.

Watering Wisdom: Growing a Healthy Lawn with Less Water

Turfgrass Species for Low-Input Minnesota Lawns

Presenter: Eric Watkins



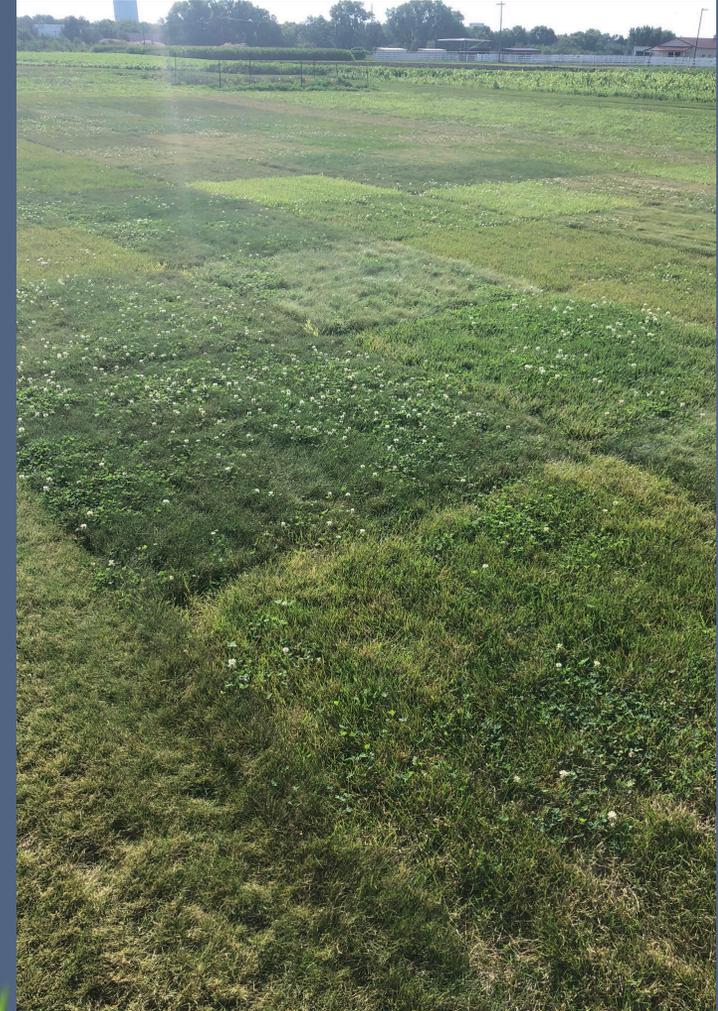
What is a low-input lawn?

Water

Fertilizer

Pesticides

Mowing



Turfgrasses for Minnesota lawns

Kentucky bluegrass

Perennial ryegrass

Tall fescue

Fine fescues

- Strong creeping red fescue

- Slender creeping red fescue

- Chewings fescue

- Hard fescue

- Sheep fescue



Kentucky bluegrass

Most popular turfgrass in northern U.S.

Lawns, golf courses, parks, and athletic fields

Positives

Aesthetics

Recuperative ability

Winter hardiness

Mowing quality

Seed or sod



Kentucky bluegrass

Negatives

Dormancy during drought

Heat stress intolerance

Shade performance is generally poor

Disease susceptibility



Perennial ryegrass

Used on home lawns, parks, and golf fairways

Positives

Quick germination and establishment

Endophyte infection

Negatives

Winter hardiness

Summer stress tolerance



Tall fescue

Introduced in United States as a forage grass

First used as turf in 1940s and 1950s

Uses

Home lawns

Athletic fields

Golf course roughs

Parks



Tall fescue

Positives

Drought avoidance

Wear tolerance

Disease resistance

Negatives

Ice cover damage

Leaf texture

Slow green-up

Perceptions



Fine fescues

Shade or sun

Greater drought tolerance

Slow vertical growth rate

Main types

Bunch type

Rhizomatous



Species

Common Name

Festuca rubra ssp. *rubra*

strong creeping red

Festuca rubra ssp. *littoralis*

slender creeping red

Festuca rubra ssp. *commutata*

Chewings fescue

Festuca brevipila

hard fescue

Festuca ovina

sheep fescue

Fine fescues-bunch type

Hard fescue (*Festuca brevipila*)

High turf quality, drought tolerant, dark green color

Chewings fescue (*Festuca rubra* ssp. *commutata*)

Excellent density, aggressive, tolerant of short mowing heights, shade tolerance

Sheep fescue (*Festuca ovina*)

Lowest maintenance, bluish-green color



Fine fescues-rhizomatous

Strong creeping red fescue (*Festuca rubra* ssp. *rubra*)

Most common, good mixed with bluegrass, less aggressive, shade tolerance

Slender creeping red fescue (*Festuca* ssp. *littoralis*)

Compact growth, tolerant of short mowing heights, good salt tolerance, shade tolerance





Kentucky bluegrass

Hard fescue



Perennial ryegrass



Tall fescue

Wear resistance

High



Tall fescue

Perennial ryegrass

Kentucky bluegrass

Fine fescue

Low



Establishment

Fast



Perennial ryegrass

Tall fescue

Fine fescue

Kentucky bluegrass

Slow

Shade tolerance

High

Fine fescue

Tall fescue

Kentucky bluegrass

Perennial ryegrass

Low



Disease resistance

High



Tall fescue

Fine fescue

Kentucky bluegrass

Perennial ryegrass

Low

Winter hardiness

High



Kentucky bluegrass

Fine fescue

Tall fescue

Perennial ryegrass

Low

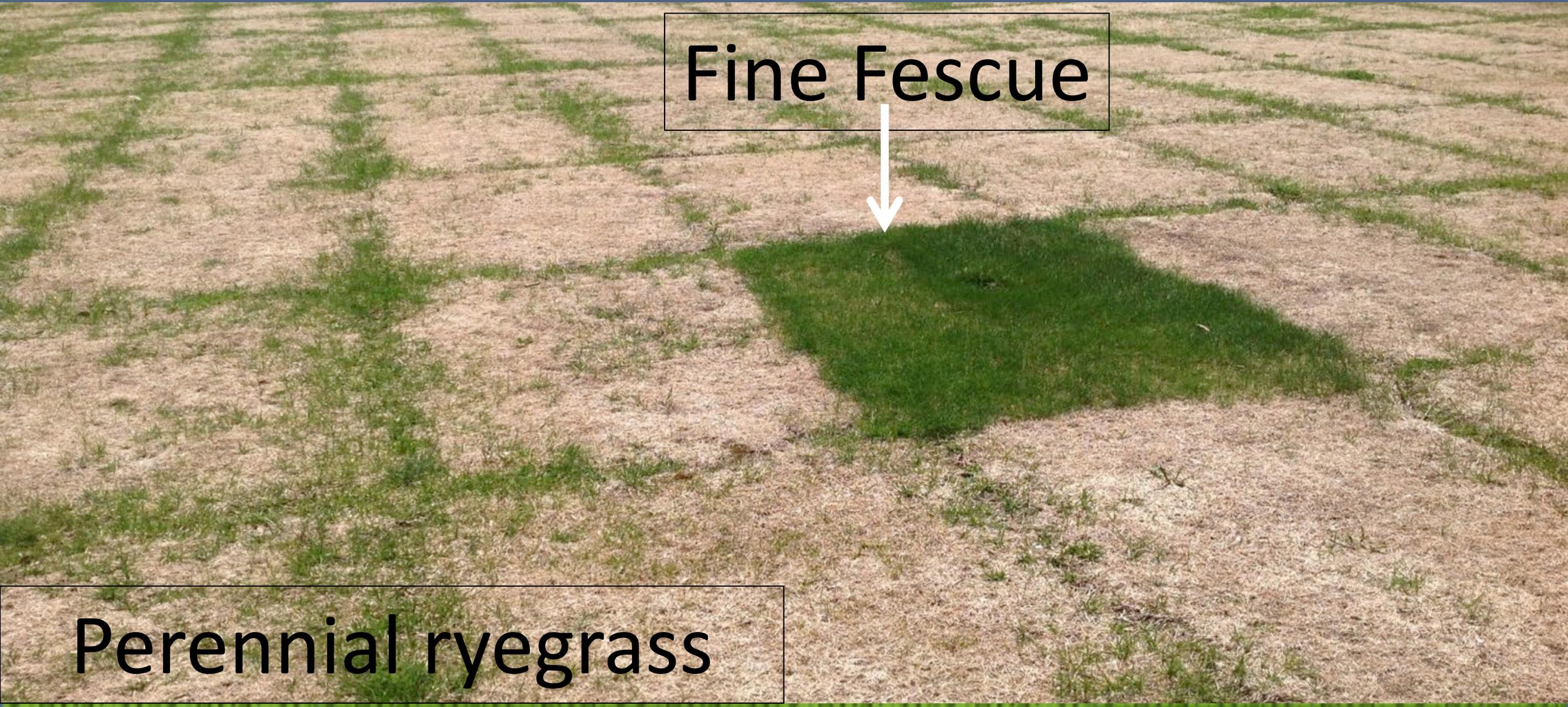


Winter damage

Fine Fescue



Perennial ryegrass



Drought tolerance

Good



Tall fescue

Fine fescue

Kentucky bluegrass

Perennial ryegrass

Poor



Testing grasses for drought tolerance

1. No irrigation
2. Prevent rainfall from reaching plots
3. Deficit irrigation



National Turfgrass Evaluation Program drought tolerance trial

Five locations in U.S.

Kentucky bluegrass and tall fescue

Three levels of irrigation

0% Evapotranspiration

25% Evapotranspiration

75% Evapotranspiration

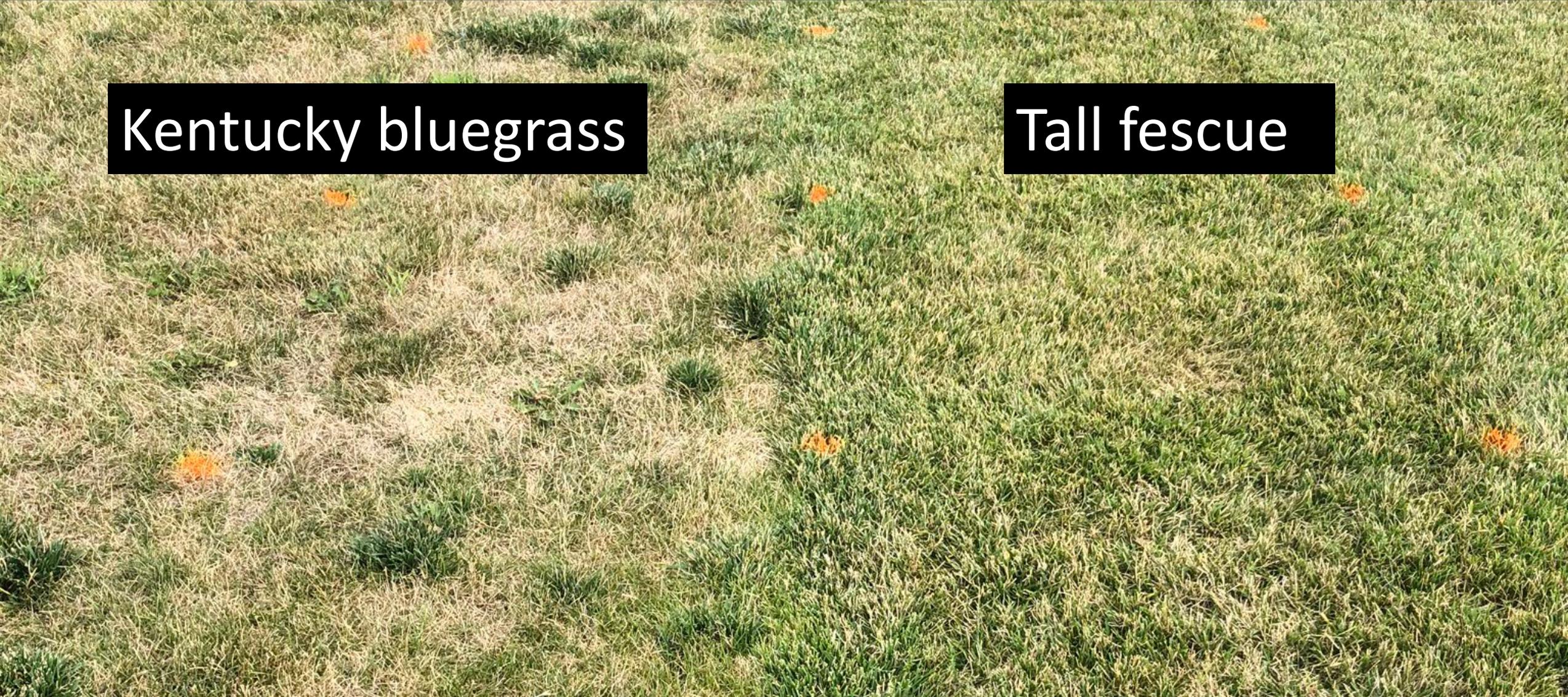




25% ET Replacement—August 6, 2020

Kentucky bluegrass

Tall fescue



Next steps

- Purchase seed
 - Use data whenever possible
 - turf.umn.edu
 - ntep.org
- Seeding
 - August or early September is ideal
 - Dormant seeding in November works well in Minnesota
 - Spring seeding may require herbicide application
- Follow best practices for turfgrass establishment
 - <https://extension.umn.edu/lawns-and-landscapes/lawn-care>



Mixing and blending seed

Mix: 2 or more species

Blend: 2 or more cultivars of the same species

Provide a more resilient turf stand

- Complementary tolerances to common stressors

- Genetic diversity

Difficult to find good data on mixtures



Fine fescue mixtures

More sun than shade

- Hard (60%)
- Chewings (20%)
- Strong creeping red (20%)

More shade than sun

- Chewings (60%)
- Strong creeping red (20%)
- Hard (20%)



Summary

Several cool-season turfgrasses can be utilized in Minnesota for low-input lawns

Use of low-input turfgrasses such as tall fescue and fine fescues can save water

Mixing turfgrass species can help provide a more resilient lawn





Questions?

Please use the Q & A feature in Zoom to ask any questions you have

Please join us for our future
webinars

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