

# 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 ^

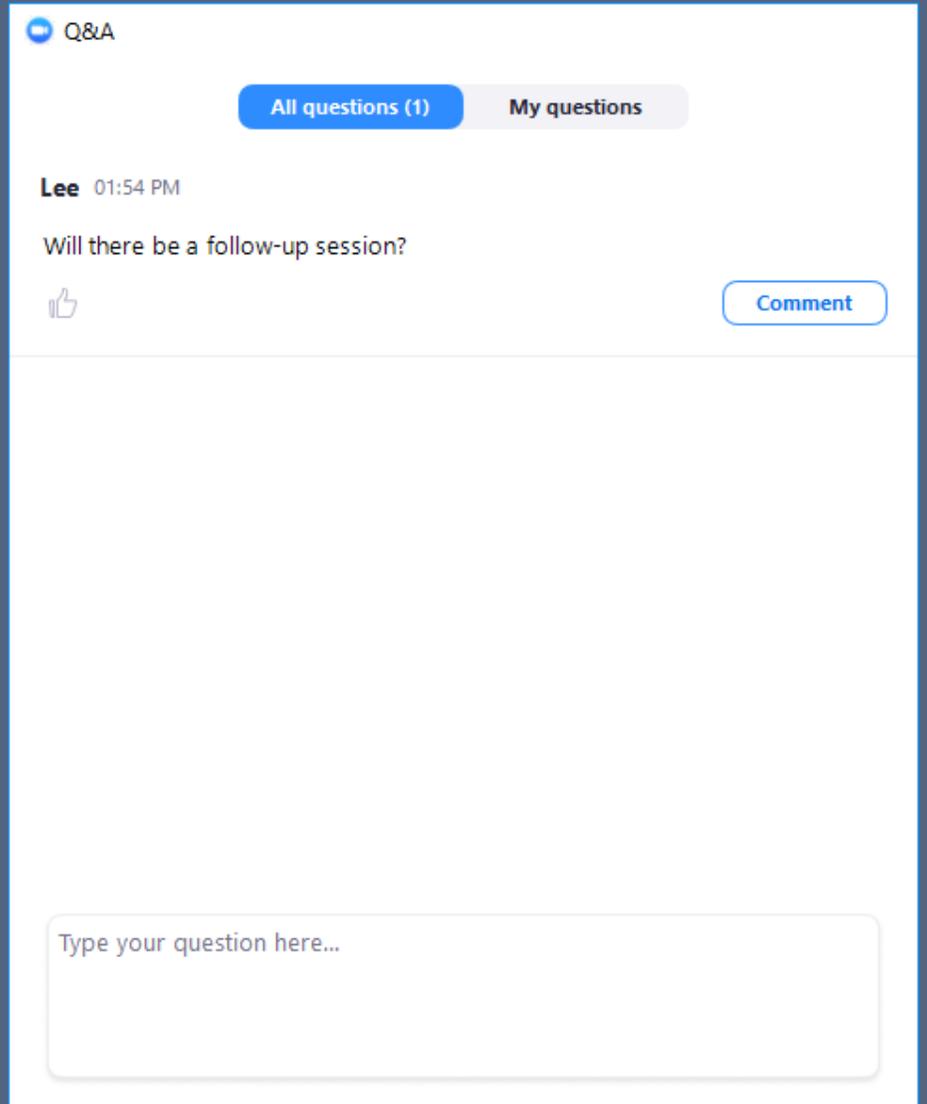


Chat



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 text 'Type your question here...'.

# Watering Wisdom: Growing a Healthy Lawn with Less Water

*Turfgrass Species for Low-Input Minnesota Lawns*

Presenter: Eric Watkins



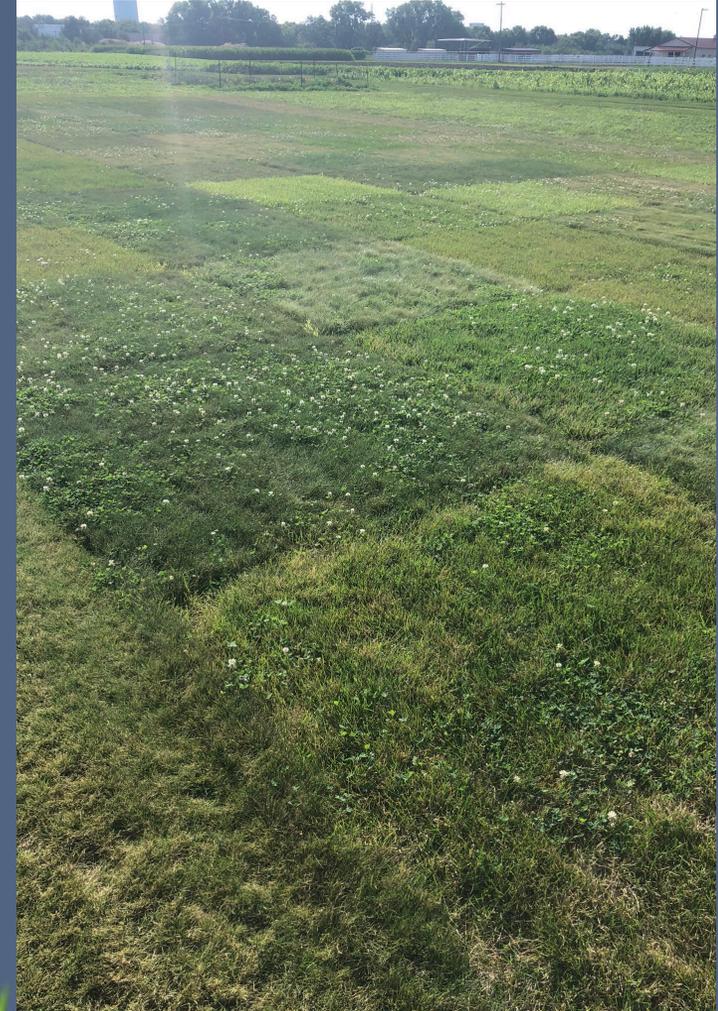
# What is a low-input lawn?

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

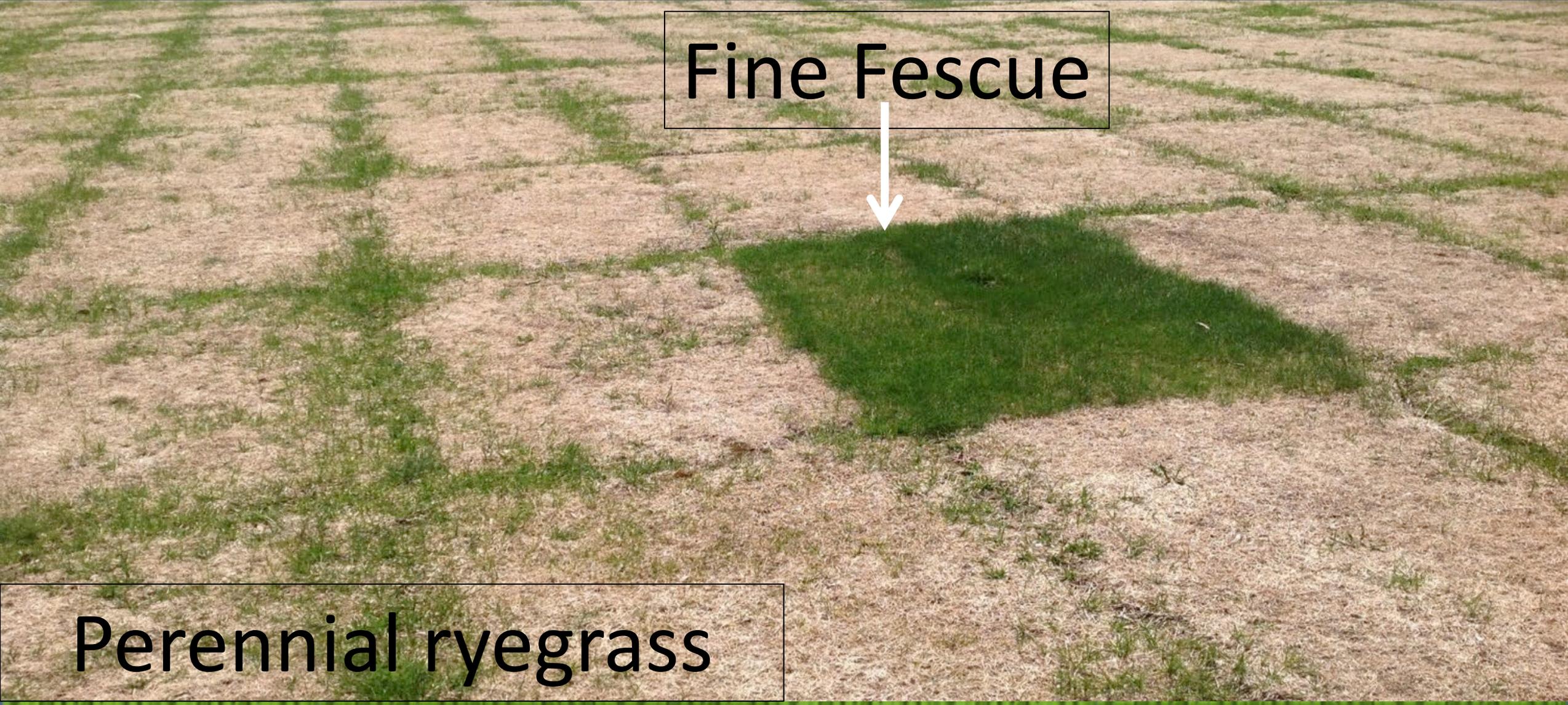


# Winter damage

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](http://turf.umn.edu)
    - [ntep.org](http://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

[sevans@umn.edu](mailto:sevans@umn.edu)

Twitter - @WaterWiseShane

