

## DEFENDING AGAINST THE INDEFENSIBLE; POA STRATEGIES THAT WORK!



Eric Fasbender, CSFM  
Grounds Manager  
University of Oregon Athletics  
efas@uoregon.edu

## What will be Covered?

## What will be Covered?

- What is Poa annua?
- Failed Strategies
- Turf Selection
- Cultural Practices
- Fertilizer Program
- Chemical Program
- Attitude
- Ideas on the Horizon
- Questions?



## What is Poa annua?

## What is Poa annua?

- Variety of Bluegrass
- Annual and Perennial
- Shallow root system
- Wide, tender blade
- Poor wear resistance
- Can produce thousands of seeds per year
- Quick germination and establishment



## Failed Strategies

## Failed Strategies

- ◉ Complacency
- ◉ Single Layer Approach
- ◉ Aerate!
- ◉ Over-seed!
- ◉ Chemical control trial & error
- ◉ Manage the Poa



## Turf Selection / Field Construction

## Turf Selection / Field Construction

Help your field fight for itself.

## Turf Selection / Field Construction

## Turf Selection / Field Construction

- ◉ Use NTEP Trials
- ◉ Turf Color
- ◉ Turf Competition
- ◉ Wear Resistance
- ◉ Wear Recovery
- ◉ Seed Germination Rates
- ◉ Resistance to Chemicals
- ◉ Turf Dormancy
- ◉ Clean Sand
- ◉ Clean Sod / Seed
- ◉ Soil Sterilizers
- ◉ Proper drainage system
- ◉ Proper irrigation system



## Cultural Practices

## Cultural Practices

Things that you can do to stem the tide and slow the enemy from taking over.

## Cultural Practices

## Cultural Practices



- Mowing
  - Promote healthy turf!
  - Collect your clippings!
  - Be alert.
  - Wash your equipment.

## Cultural Practices



- Irrigation
  - Poa thrives in wet soils
  - Deep and infrequent watering!
  - Can help Poa survive in the summer.

## Cultural Practices



- Verti-cut
  - Cut rhizomes / stolens
  - Improve desired turf density
  - Thin Poa patches
  - Prepare seed-bed

## Cultural Practices



- Aeration
  - Hollow vs. Solid
  - Collect your cores!
  - Improve desired turf density
  - Prepare seed-bed

## Cultural Practices



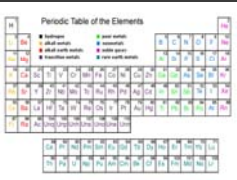
- Top-dressing
  - Clean material!
  - Protect desired turf
  - Protect desired seed

## Cultural Practices



- Over-seeding
  - Clean Seed!
  - Assist with turf recovery
  - Improve desired turf density

## Cultural Practices



- **Excessive Nutrient Levels**
  - Poa prefers high phosphorus levels
  - Nitrogen encourages seed germination and plant growth.
  - Disease of desired turf.

## Cultural Practices



- Continuously wet and compacted soils
  - Allows shallow roots to thrive
  - Chokes your desired turf

## Cultural Practices

- Wildlife Concerns
  - Get them outta here!
  - Carry seeds from other fields.
  - Thin desired turf

## Cultural Practices



- Address Injuries!
  - Pre-germinate seed
  - Hex-Plugs
  - Sod large sections

## Fertilizer Program

## Fertilizer Program

Having strong, healthy turf that can recover from injury is half the battle.

## Fertilizer Program

## Fertilizer Program

- Liquid Applications every 2 weeks



## Fertilizer Program

- Nitrogen



## Fertilizer Program

- Nitrogen
  - Turf color
  - Shoot growth
  - Shoot density
  - Root growth
  - Climate hardiness
  - Wear tolerance
  - Wear recovery
  - Disease resistance





## Fertilizer Program

### • Phosphorus



## Fertilizer Program

### • Phosphorus

- Seed establishment
- Plant maturation
- Root growth
- Ridged plants
- Wear resistance



## Fertilizer Program

### • Potassium



## Fertilizer Program

### • Potassium

- Plant energy!
- Root growth
- Climate hardiness
- Wear tolerance
- Wear recovery
- Disease resistance



## Fertilizer Program

### • Calcium



## Fertilizer Program

### • Calcium

- Plant catalyst
- Stimulate root and leaf growth
- Aid seed germination
- Improved cell structure
- Aid disease resistance



## Fertilizer Program

### Organic Acids



## Fertilizer Program

### Organic Acids

- Improve nutrient holding capacity
- Support microbes
- Improved soil structure
- Aid seed germination



## Fertilizer Program

### Micro Organisms



## Fertilizer Program

### Micro Organisms

- Thatch breakdown
- Increased CO<sub>2</sub> in soil
- Free-up nutrients in soil
- Water availability
- Improved drainage



## Chemical Program

## Chemical Program

Sometimes you can't do it on will alone,  
here are some tools to help.

## Chemical Program

## Chemical Program

- ProGrass  
(Ethofumesate)



## Chemical Program

- ProGrass  
(Ethofumesate)
  - Selective Herbicide
  - 2 apps / year



## Chemical Program

- Trimmit  
(Paclobutrazol)



## Chemical Program

- Trimmit  
(Paclobutrazol)
  - Growth Regulator
  - 3 apps / year



## Chemical Program

- Primo  
(Trinexapac-ethyl)





## Chemical Program



- Primo  
(Trinexapac-ethyl)
  - Growth Regulator
  - apps every 2 weeks  
(May – August)

## Chemical Program



- Round-Up  
(Glyphosate)

## Chemical Program



- Round-Up  
(Glyphosate)
  - Systemic Herbicide
  - apps as needed

## Chemical Program



- Andersons w/ TGR  
Poa control  
(Paclobutrazol)

## Chemical Program



- Andersons w/ TGR  
Poa control  
(Paclobutrazol)
  - Granular Fertilizer w/  
Growth Regulator
  - 3 apps / year

## Chemical Program (other products)



- Dimension  
(Dithiopyr)

## Chemical Program (other products)

- Dimension (Dithiopyr)
  - Pre-emergent Herbicide
  - 1, 2 or 3 apps / year



## Chemical Program (other products)

- Velocity (Bispyribac-sodium)



## Chemical Program (other products)

- Velocity (Bispyribac-sodium)
  - Selective Herbicide
  - Ryegrass ONLY!



## Attitude!

## Attitude!

Take the fight to the plant!

## Attitude!

## Attitude!

- See it, Kill it!!!
- Zero Tolerance!!!
- Poa is the enemy!
- Do not get Discouraged!!!



## Ideas on the Horizon

## Ideas on the Horizon



- Round-up Ready Gene
- Cool Season Bermudagrass
- Sulfonyleurea
- Biological control (Xanthomonas)
- Speed Zone Q
- Tenacity

## Questions?

