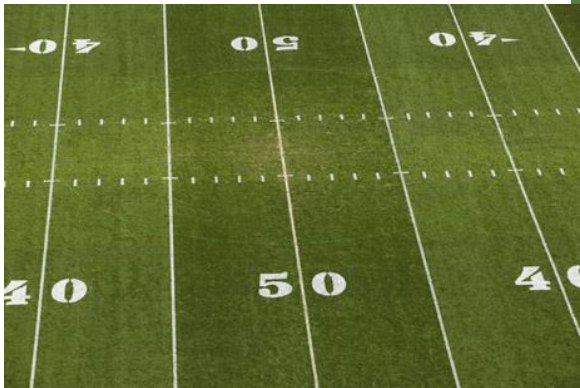


# ***Athletic Field Maintenance***



*Tim Gagnon*

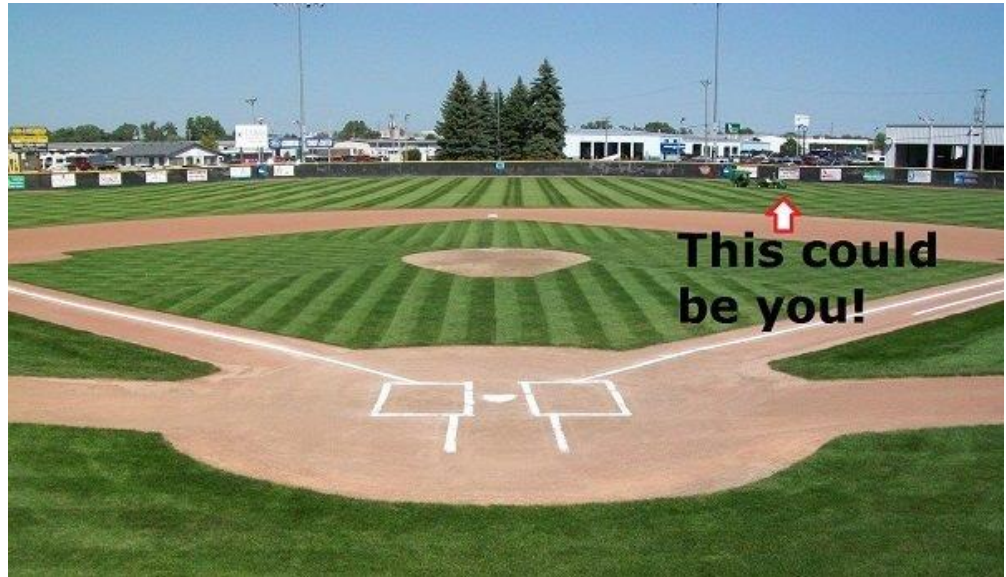
*Certified Turf Specialist*

*Insight FS*



# 7 Basics for Turfgrass Field Care

- Mowing
- Watering
- Fertilizing
- Aeration
- Overseeding
- Topdressing
- Weed and Pest Control (IPM)



# Mowing

- Never remove more than 1/3 of the plant in a single cutting
- Vary directions in off season
- Raise height of cut in summer if not irrigated
  - In season – 2 1/4 - 2 3/4
  - Off Season – 2 3/4 - 3

*Keep blades sharp!*





# Irrigation

Fields in use need  $\approx 1''$  of water each week in warmer months

June, July, August

Run irrigation as close to sunrise as possible, done by 9 am

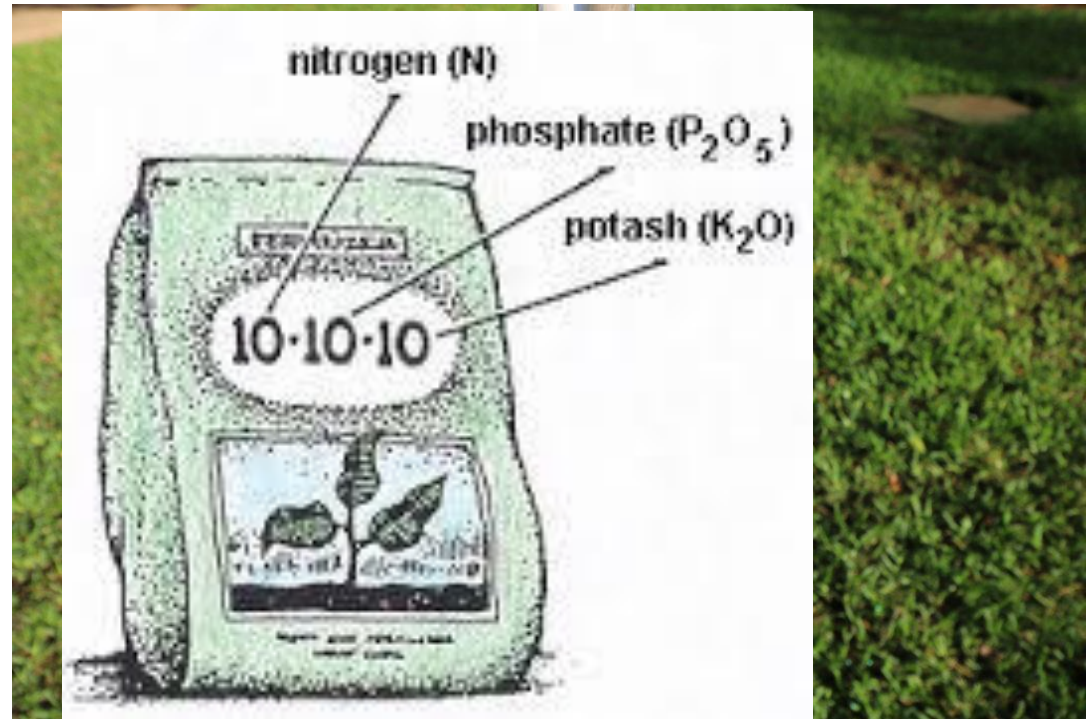
As nights get longer, adjust irrigation to less frequent but deeper events.

- Seasonal Adjust



# Fertilization

- Soil sample to find out where to begin
- N-P-K
  - **Nitrogen** – promotes growth and color
  - **Phosphorus** – root development
    - **Important at seeding**
  - **Potassium** – water relations and health
- Use starter fertilizer when overseeding
  - Day seeded and 3 weeks later



# When to fertilize

- Early May
  - Crabgrass control
- Late June
  - Grub control
- Mid August
  - Standard slow release for growth

Fertilize proactively  
*Before damage occurs*





# Aeration



1. Alleviates compaction & loosens soil - safety
2. Allows gas exchange
3. Encourages deeper rooting and decreases thatch accumulation
4. Reduces runoff of irrigation
5. Improves fertilizer uptake and irrigation efficiency

# Overseeding

- Introducing seed into areas to replace worn or damaged turf
- Can be done with or without mechanical means in high traffic areas
- Tie together aeration and overseeding





# Topdressing



- Spreading a thin layer of material to modify the surface or to fill holes and inconsistencies
- Can be used to cover seed, add field amendments, rebuild a crown to a field or fill in low spots

# Weed & Pest Control

- Done on an “as needed” basis- IPM
- Time your application to *most effective* control, not “most convenient”
  - Late fall application for perennial weeds + pre
  - Late spring if annuals or insects are a problem
  - Chemical choice



# Have a plan

- Work with industry professionals to develop a “maintenance standard” *with administrators involved in the process*
  - Height of cut, turf quality, weed %, compaction, etc
  - Establish defined specifications and expectations
- Record all cultural practices, fertilizer applications, soil test results, chemical applications, and include weather conditions
- Advocate for your time and materials, no one else will



# FIELD SAFETY BEGINS AT THE GRASS-ROOTS LEVEL



Player safety, at any level, doesn't stop with the coaching staff and the players. The field conditions play a big role, right down to the soil. Insight FS offers a service to help sports field managers take a comprehensive approach to managing athletic field conditions. This program addresses the concerns for player safety at both the administrative and field maintenance level.

## FIELD MANAGEMENT ASSESSMENT ELEMENTS

- **Plant Health** – Turf quality and density on defined high-traffic areas
- **Soil Compaction (Hardness)** – Measured with penetrometer multiple times each year with relative soil moisture readings
- **Soil Sampling** – Pulled on regular intervals and monitored
- **Weed and Insect Control** – Surveying done with each visit to determine acceptable levels and expectations
- **Reporting** – Results compiled in a report and updated after each assessment



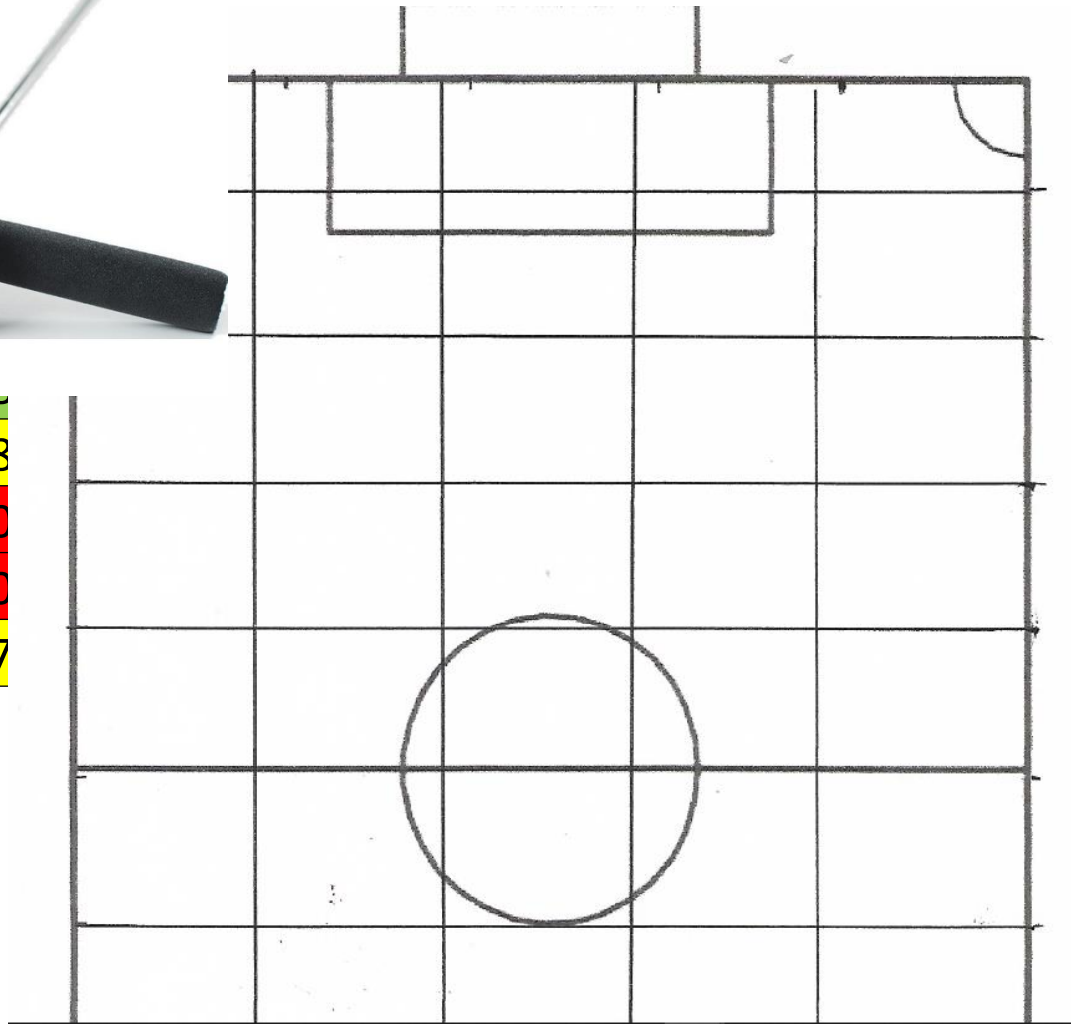
This tool is designed to give field managers some hard data on issues that directly affect player safety, in a form that can be quantified and compared year over year. Relaying and sharing this information with decision-makers is sometimes difficult. Our goal is to have field managers use this plan to monitor field conditions through various times of the year, and for administrators to be aware of how cultural practices can affect long-term turf quality and player safety.



# Measurements



|   |     |    |  |
|---|-----|----|--|
|   |     |    |  |
| 4 | 186 | 28 |  |
| 4 | 400 | 40 |  |
| 4 | 232 | 30 |  |
| 4 | 377 | 27 |  |



|  |  | 9   | 10  |
|--|--|-----|-----|
|  |  | 76  | 154 |
|  |  | 301 | 305 |
|  |  | 400 | 281 |
|  |  | 380 | 400 |
|  |  | 65  | 205 |

# BMP's

- Introduced in 2021, outlines a comprehensive plan from building to maintenance specifically geared to athletic field managers
  - 100+ pages
  - Customizable to your facility or school
  - Includes synthetic field care, chemical storage, and emergency info
- [www.stma.org](http://www.stma.org)





# Where do I begin? Where you can!

- Set yourself up for success by prepping ball fields in fall
- Less mowing needed
- Firm soil conditions compared to spring
- Easier to grade infields/shape mounds/aerify turf while soils are dry



# Fall care for ball fields:

1. Treat turf-aerify,



conditioners, edge  
and clear weeds

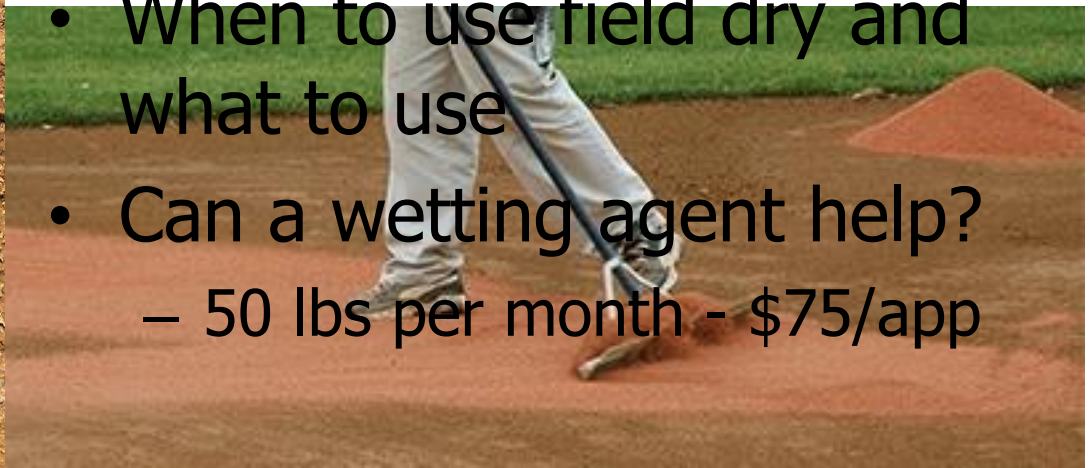


# Ball fields

Infield moisture management



- Differences of conditioners and top dress materials
- Conditioners – manage moisture with your existing infield mix - are **mixed in**
- Top dress – left on top to color and act as dust mulch
- When to use field dry and what to use
- Can a wetting agent help?
  - 50 lbs per month - \$75/app





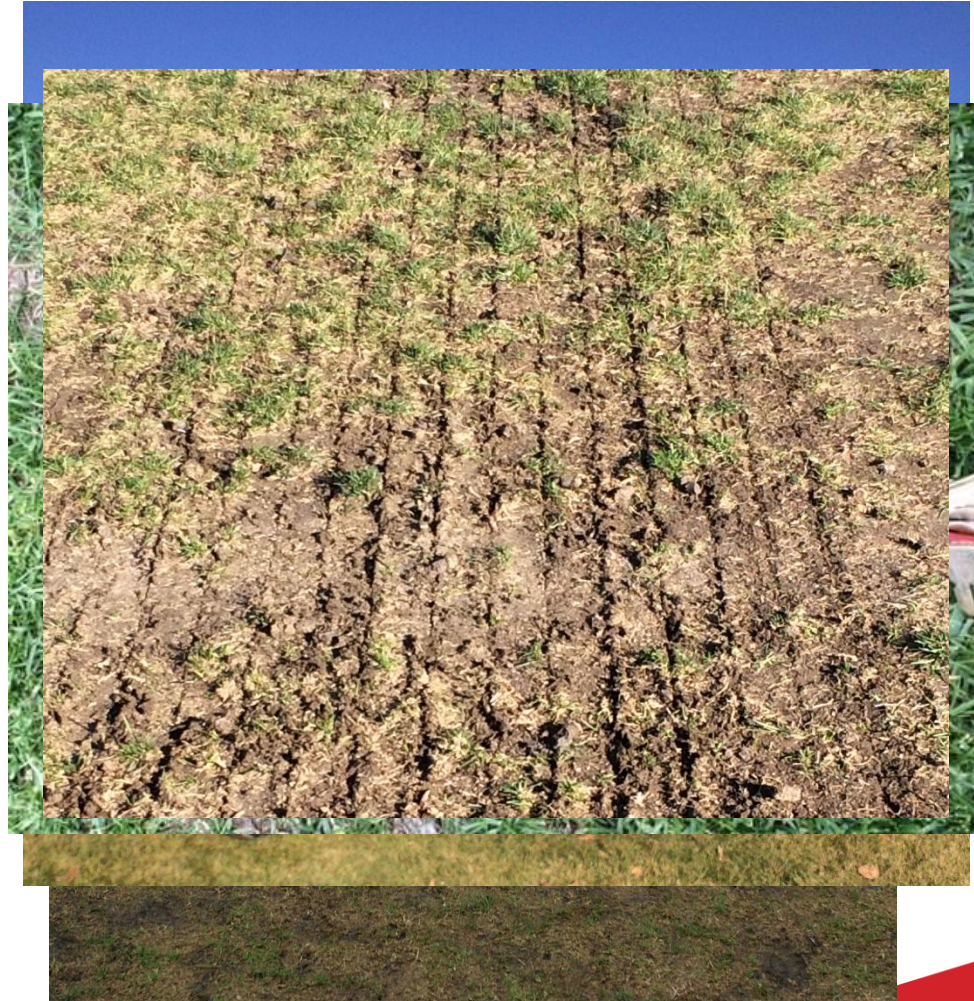
# Fall care for soccer and football





# Got a few minutes?

- 5 lbs seed, rake, 1 bag Turface, 10 minutes time
- If large areas, use the right tool for the job
  - Seed/soil contact is key
  - Concentrate where you need it



# Helpful links

- Turface
  - <https://www.turface.com/education>
- Beacon Athletics Groundskeeper U
  - <https://groundskeeperu.com/>
- Sports Turf Managers Association
  - [www.stma.org](http://www.stma.org)
- Growing degree day tracker
  - <https://gddtracker.msu.edu/>



# Questions?

Tim Gagnon

[tgagnon@insightfs.com](mailto:tgagnon@insightfs.com)

414-333-8082

