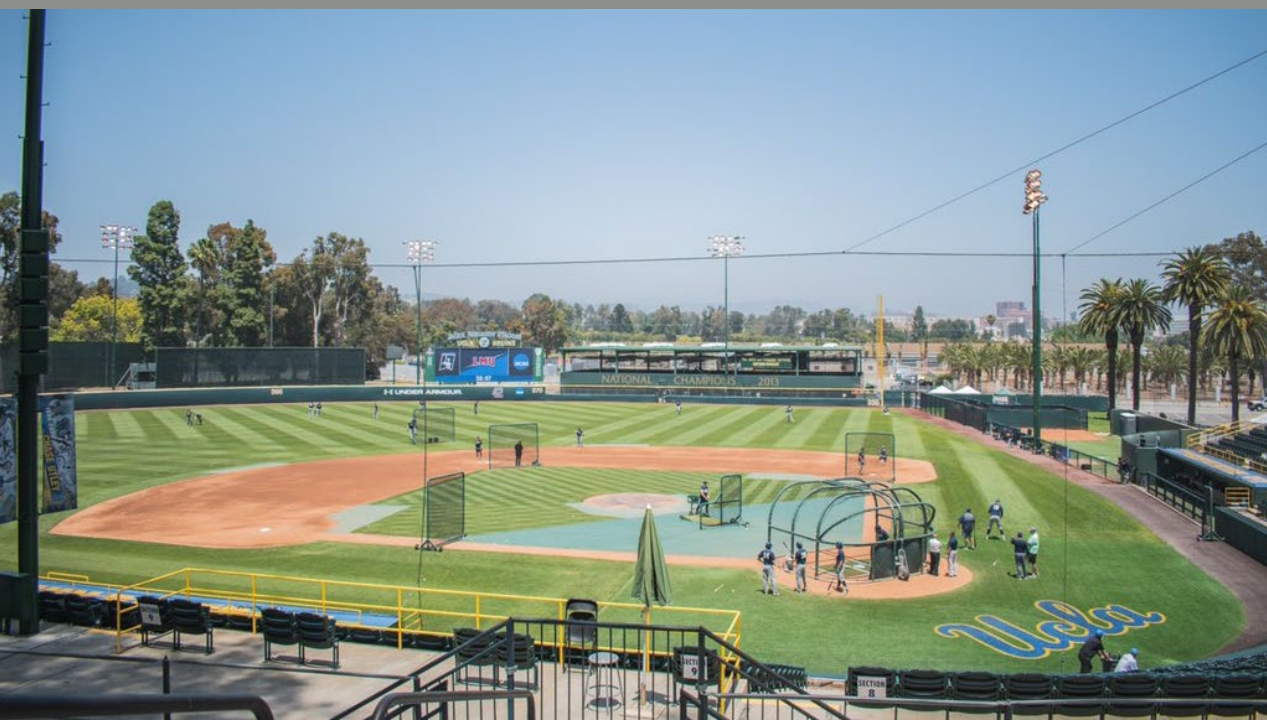
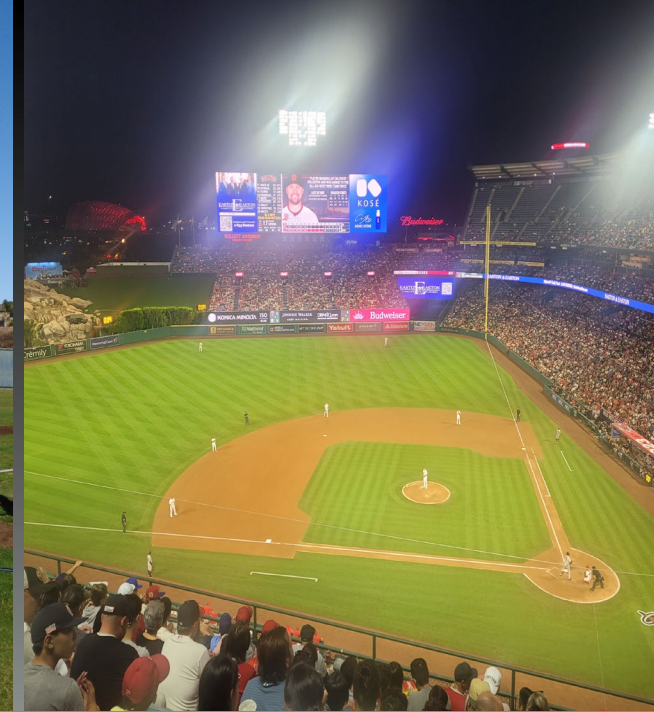




# Rejuvenating Your Baseball Field for a New Season

Please scan the QR  
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this session.





# REJUVENATING YOUR BASEBALL FIELD FOR A NEW SEASON

Paul Cushing  
Agronomist – Sports Field Specialist



# THANK YOU DR. KENT KURTZ - STMA PIONEER



# PAUL CUSHING - AGRONOMIST



**TORREY PINES GOLF  
COURSE**



**RIVIERA COUNTRY  
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**SHADOW CREEK  
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# TORREY PINES GOLF COURSE – SAN DIEGO CA



# TORREY PINES GC - #1 MAINTAINED GOLF COURSE ON THE PGA TOUR - 2014



# PC TURF - AGRONOMIC SERVICES

Professional Soil & Water Testing

Analysis and Independent Fertility  
Recommendations

Sports Field Agronomic Day &  
Monthly Visits

Spraying Services

[www.pcturfpro.com](http://www.pcturfpro.com)

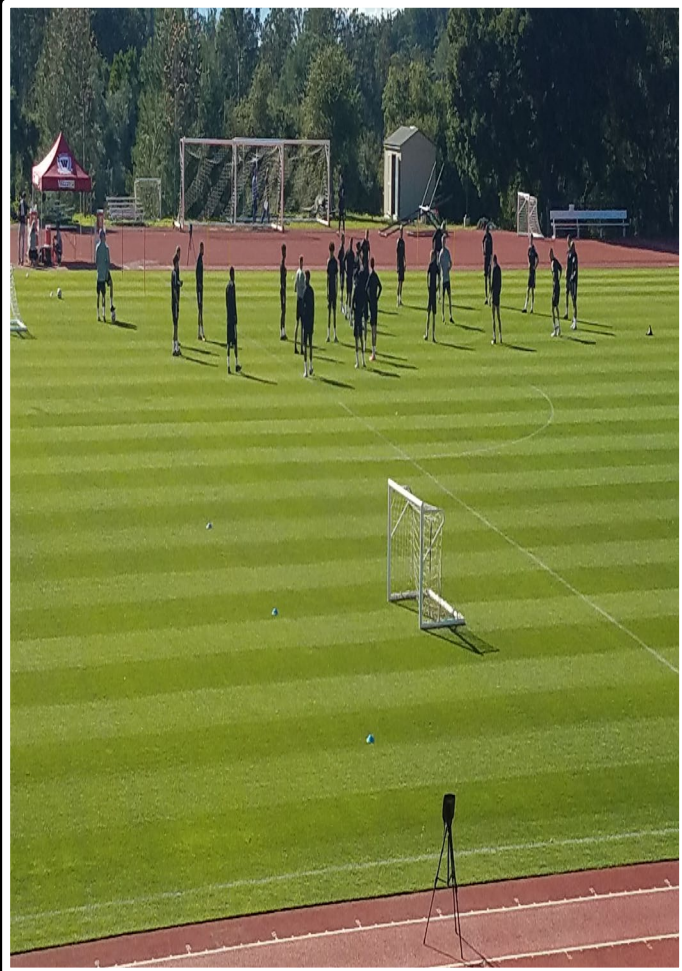


# UNIVERSITY ATHLETIC FIELDS





# PROFESSIONAL FIELDS



# HIGH SCHOOL SPORTS FIELDS



# YOUTH SPORTS FIELDS



# HIGH SCHOOL – TRAVEL – YOUTH COACH



# REJUVENATING YOUR BASEBALL FIELD FOR A NEW SEASON

## SESSION GOALS

- Proper Turfgrass Selection & Management Practices
- Proper Mowing Height of Cut (HOC)
- Soil Testing + Understanding Results + Balancing Soil Chemistry
- Aerification & Cultural Practices
- Infield Dirt & Mound Management + Preparation
- Irrigation Strategies



# UCLA – JACKIE ROBINSON STADIUM WESTWOOD CA



# CAL POLY SAN LUIS OBISPO – BAGGETT STADIUM

## SAN LUIS OBISPO CA

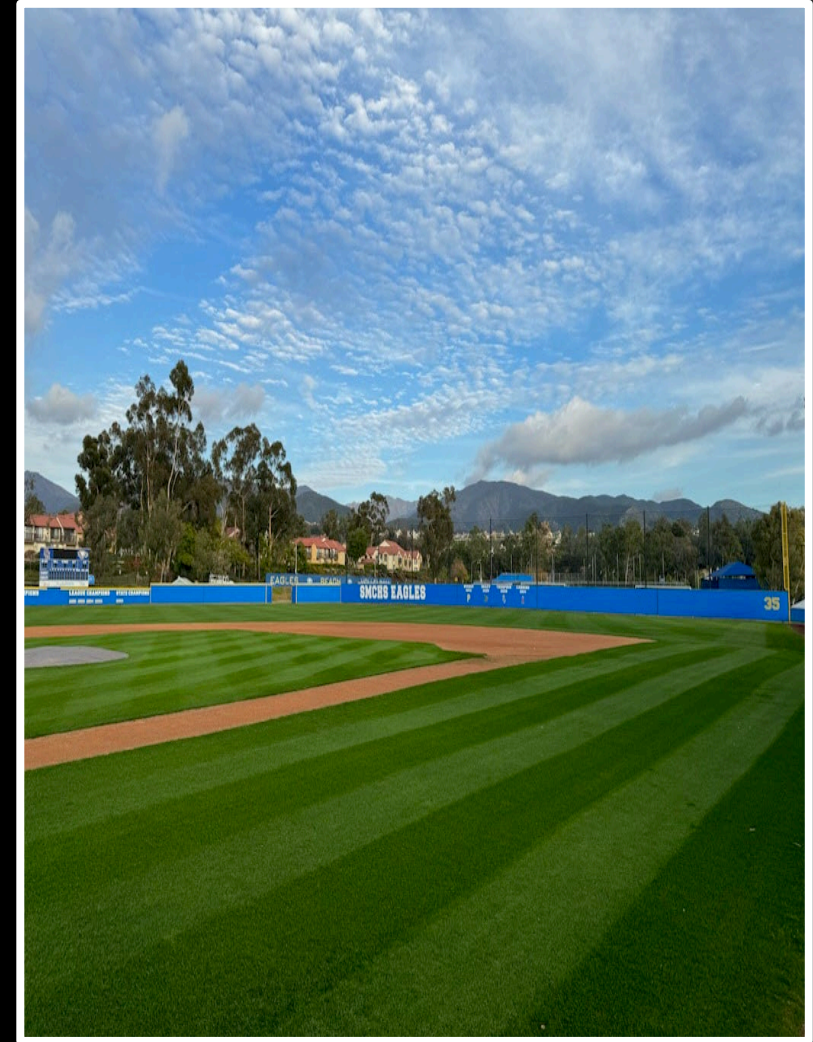


# SANTA MARGARITA CATHOLIC HIGH SCHOOL ORANGE COUNTY CA





# SANTA MARGARITA CATHOLIC HIGH SCHOOL 2024



# SAN MARCOS HIGH SCHOOL

## SAN DIEGO CA



# MISSION HILLS HIGH SCHOOL SAN DIEGO CA



# WEST HILLS LITTLE LEAGUE BASEBALL

## WEST HILLS CA





PROPER TURFGRASS SELECTION & MANAGEMENT PRACTICES



# PROPER TURFGRASS SELECTION

- Dependent on time of season and location
- Bermudagrass (warm season) turf base is desirable in the southern states
- If overseeding is necessary, transitioning out after season is essential
- Turf pigment is an important tool instead of overseeding
- Solid tine aerification and sand topdressing is essential during season regardless of turf type
- Use of Slow-release fertilizers throughout the growing season is extremely important

# HEIGHT OF CUT (HOC) ON YOUR BASEBALL FIELD

- Turf Management 101 tip- never mow off more than 1/3 of a turfgrass leaf blade at one time
- Lower HOC in spring when turf is greening and coming out of winter dormancy
- $\frac{3}{4}$ " to  $1\frac{1}{4}$ " is a proper HOC for a baseball field
- Raise HOC in summer when turf is under heat stress
- Lower HOC in fall again to keep turfgrass canopy tight
- When possible, use reel mowers for lower HOC
- Fun Fact!!!- The lower the HOC & mowing the field on a greater frequency, the fewer weeds you'll have in your turf areas
- When possible, use turfgrass growth regulators on highly maintained fields





IMPORTANCE OF SOIL TESTING & BALANCING SOIL CHEMIST

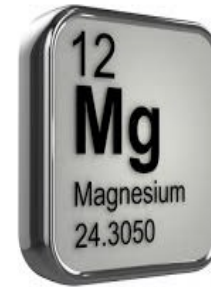
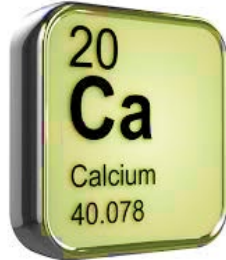
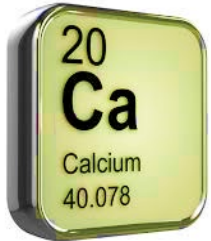
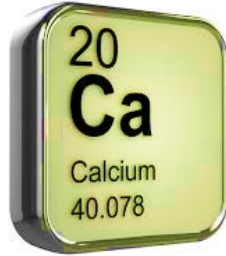
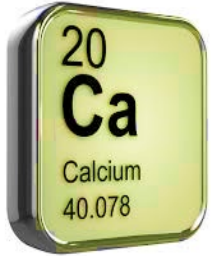




# PROGRAMS TO COMBAT POOR SOIL QUALITY

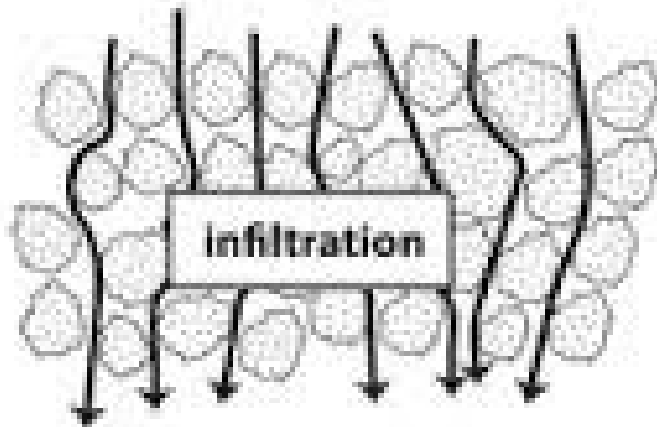
- Soil and water testing 2X per year
- Deep and infrequent irrigation cycles
- Utilize calcium to regularly leach salts and improve soil structure
- Frequent applications of Potassium to harden off plants & strengthen cell walls (Added turgidity)
- Water treatment (Magnetic or Reverse Osmosis) *Turbulator by Magnation*

# BUILDING A HEALTHY SOIL – WHAT'S THE PROPER RATIO?

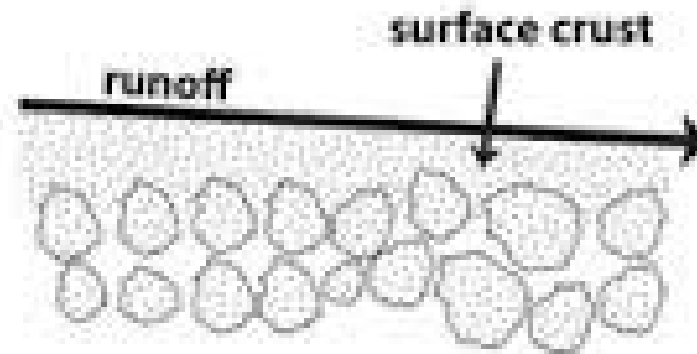


# BALANCING CALCIUM AND MAGNESIUM

Changes in water flow due to soil crusting/compaction.



a) aggregated soil



b) soil crusts over after aggregates break down

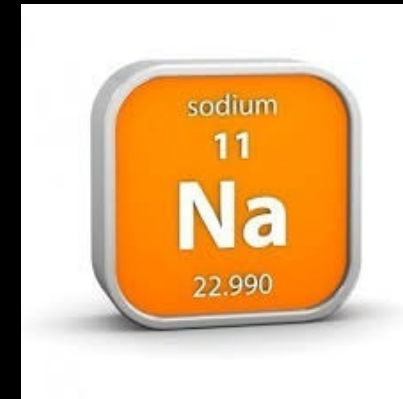
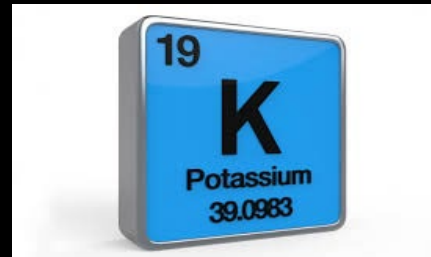
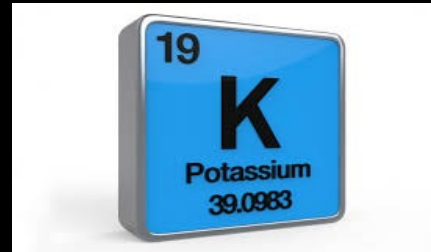
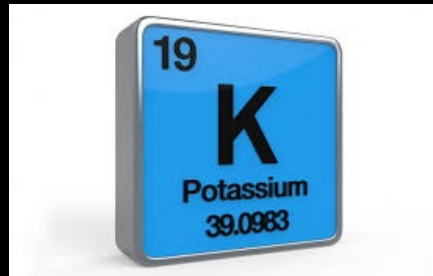
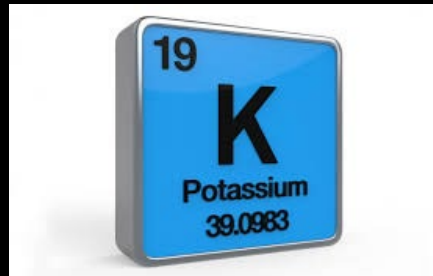
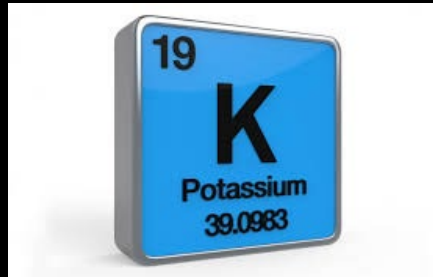
# CALCIUM TO MAGNESIUM RATIO

Ca:Mg - 6:1

- Soils Flocculate – Infiltration and percolation of water in the upper rootzone
- Nutrients in soils have greater availability
- Drier soils = healthier plants
- Less weed populations (*Poa annua*)



# K:Na - A REALLY IMPORTANT RATIO!!!!



# PAY CLOSE ATTENTION TO THESE DETAILS WITH YOUR FIELDS

## Information About Your Soil Testing That Really Matters

- Ca:Mg Ratio 6:1 (Water Movement)
- K:Na Ratio 5:1 (Nutrient Availability – Plant Turgidity)
- Sulfur -100 (Gypsum vs. Hi-Cal Lime)
- Organic Matter (1%-2% Sand Based Fields)  
(2%-5% Natural Soil Based Fields)
- Iron and Manganese (Color)
- Phosphorous – 400 and Above





# AERIFICATION AND CULTURAL PRACTICES

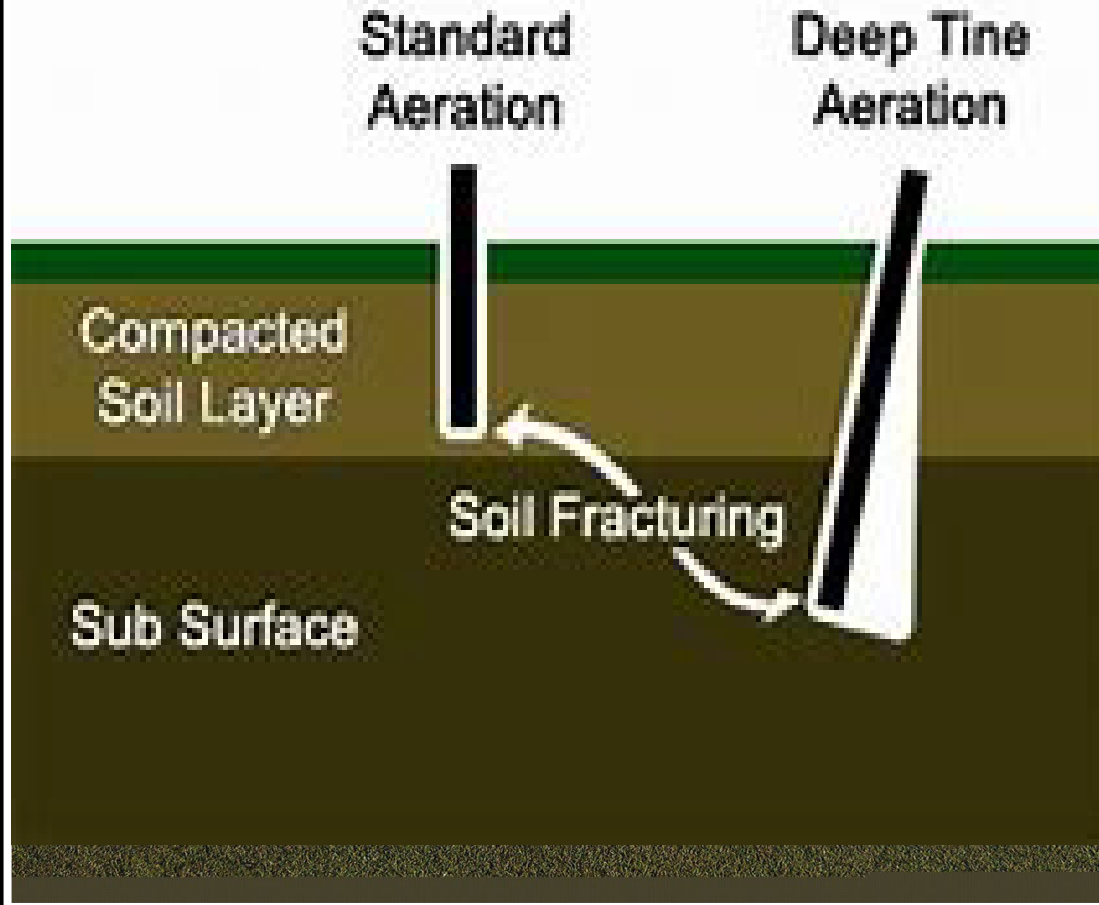
# IMPORTANCE OF PHYSICAL AERIFICATION





# IMPORTANCE OF DEEP TINE AERIFICATION

## Advantage of Deep Tine Aeration



# WARM SEASON GRASS VERTICUTTING



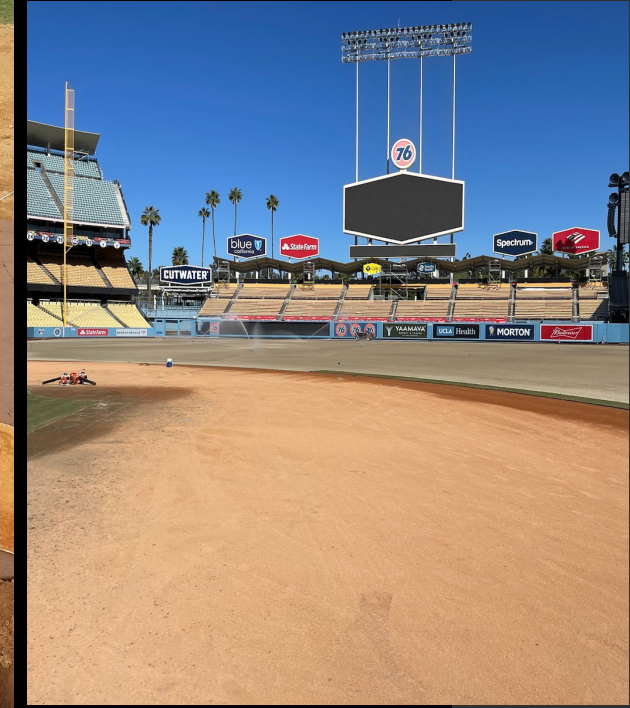
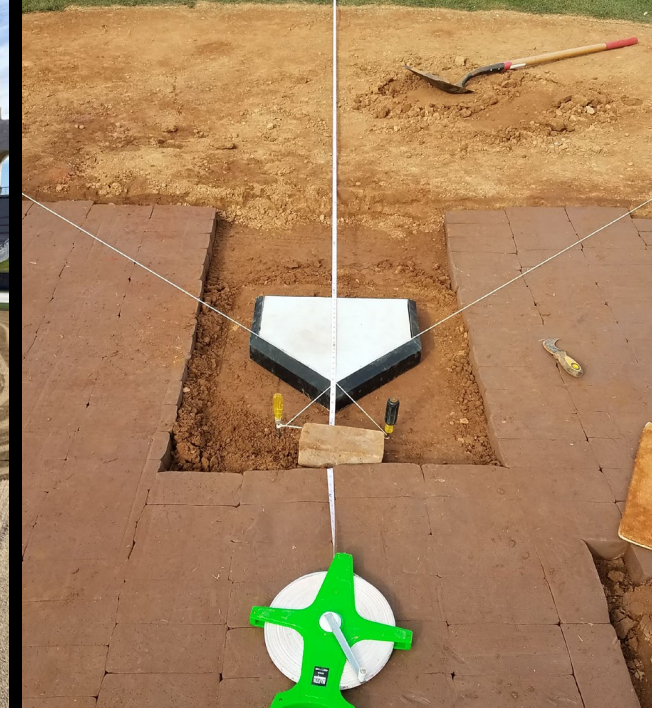
# SAND TOPDRESSING BASEBALL FIELDS





# WEED CONTROL

- Proper HOC and Mowing Frequency plays a key role in weed control
- Combination of **carfentrazone-ethyl, mecoprop-p acid, dicamba acid and 2,4-D & clopyralid** are a solid mix to control a broad spectrum of broadleaf weeds
- Let materials sit on leaf blades at least 24 hours before watering
- Water all weed control applications before allowing players to utilize fields
- Add fertilizer and/or wetting agents to improve chemical uptake of weeds
- Apply pre-emergent weed applications 2X per year to control broad leaf weeds

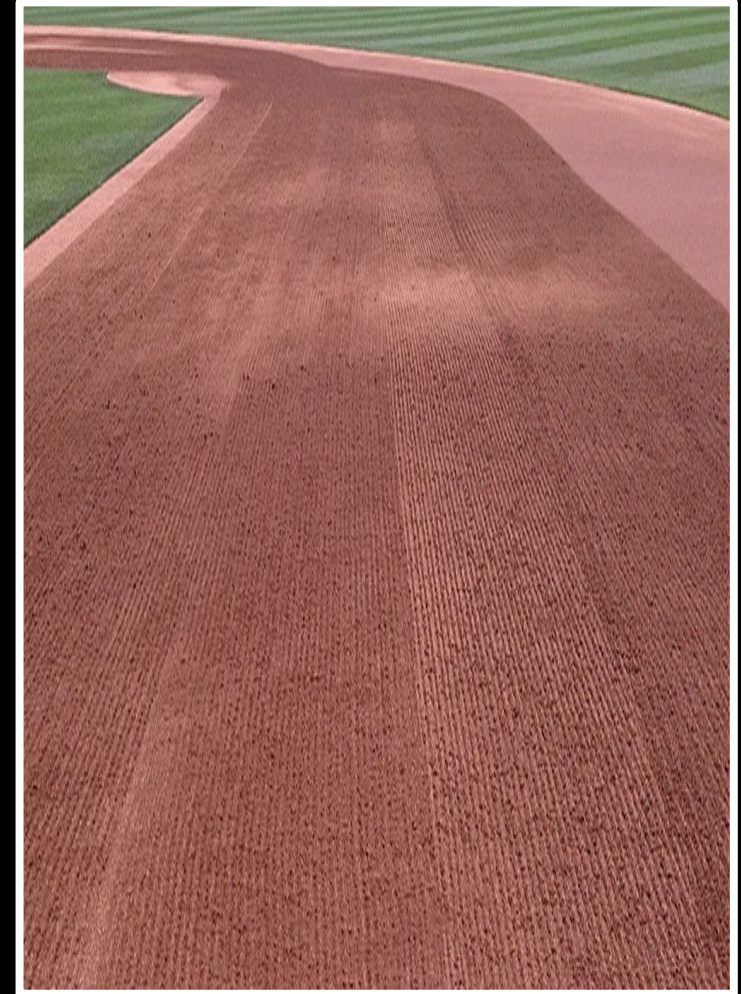
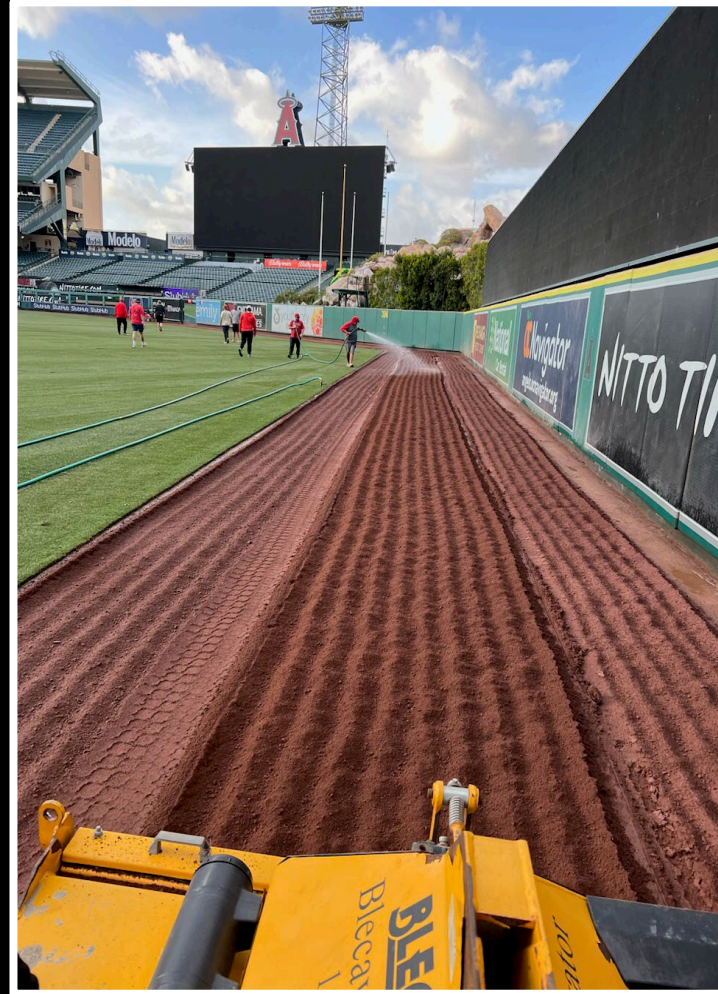


# Baseball Field Dirt Management

**MOISTURE...MOISTURE...MOISTURE!!!!**



# ROTO TILLING – SCARIFYING - NAIL DRAGGING

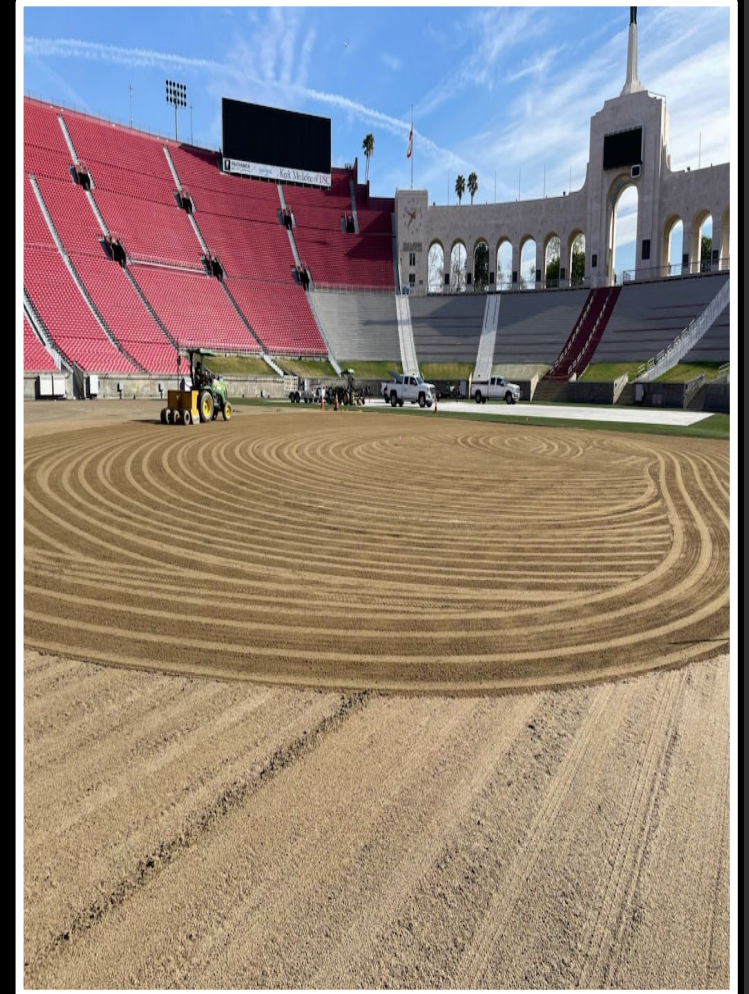
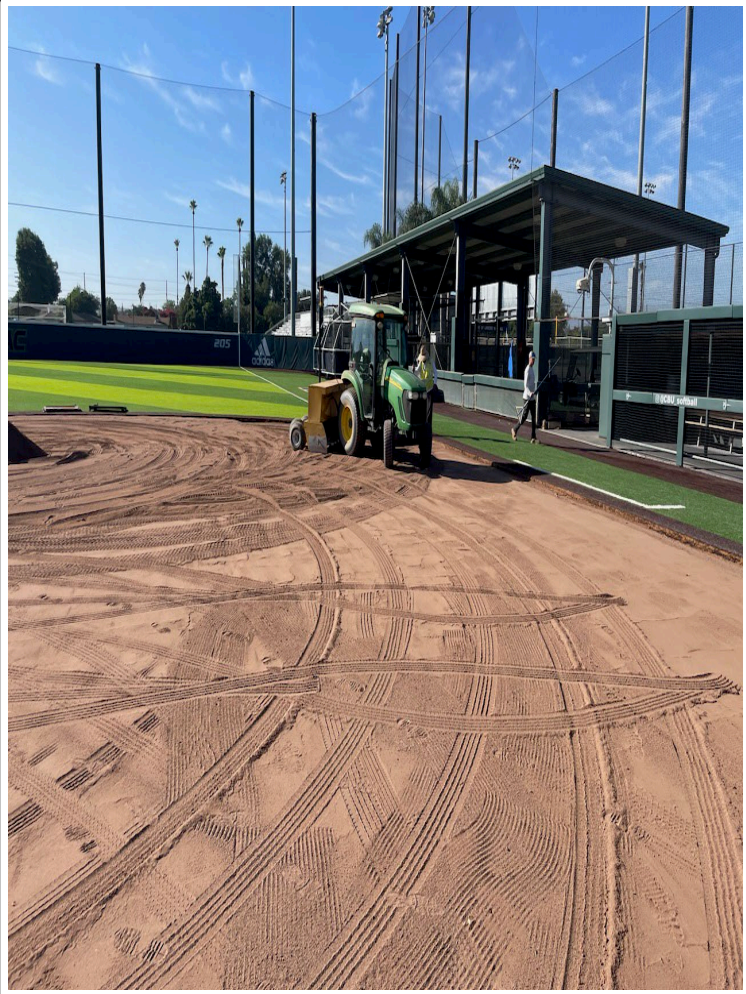


**MOISTURE...MOISTURE...MOISTURE!!!!**





# LASER GRADING – FINISH GRADE



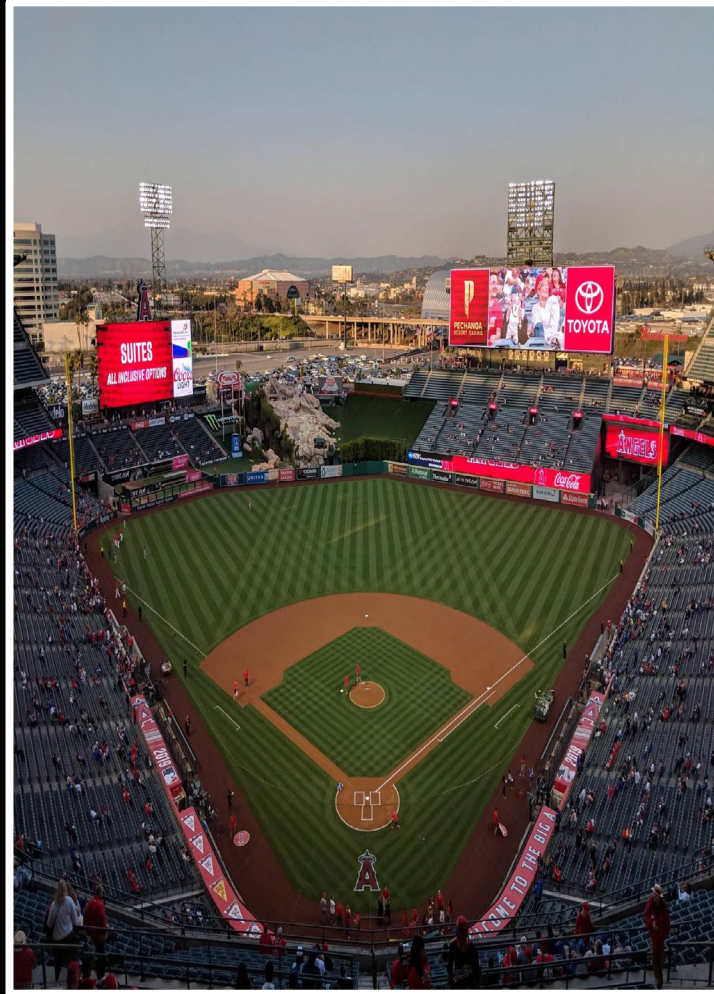
# MOISTURE...MOISTURE...MOISTURE!!!!



# ROLLING

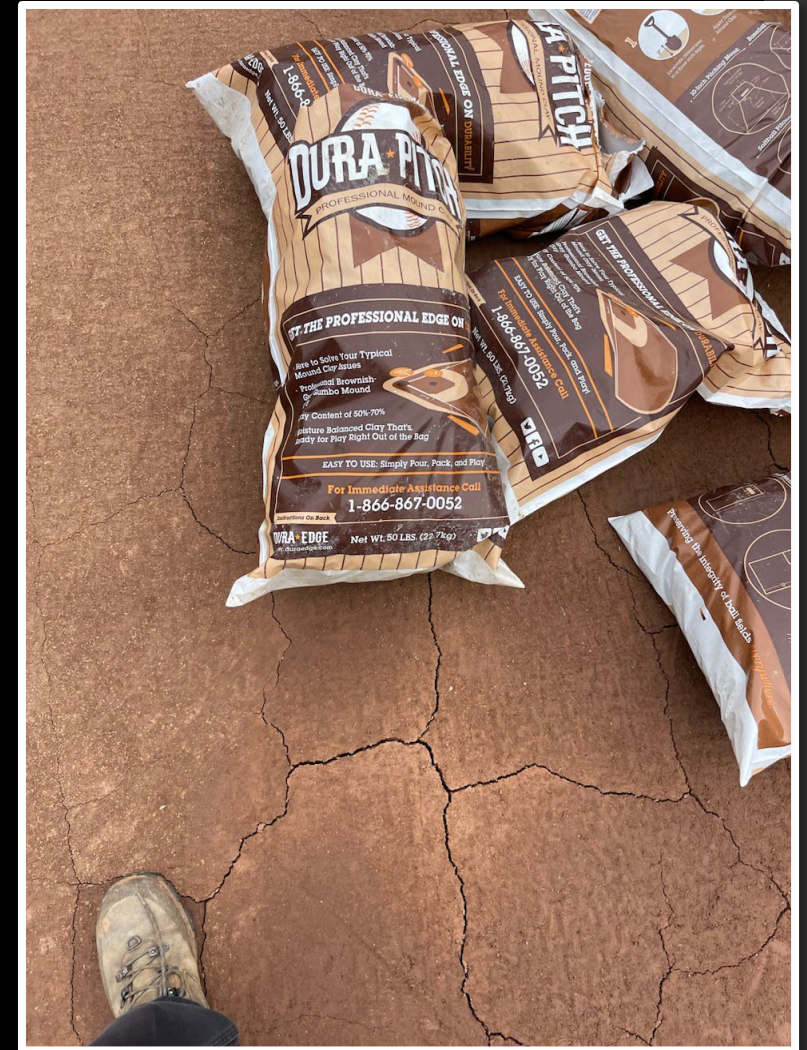


# PLAY BALL!



# KEY TO SUCCESS FOR DIRT INFIELDS

- 60% Clay – 40% Sand Mix is ideal for baseball infields
- Proper use of stabilizer products for surface management
- Heavy water after games & practices
- Nail drag the following morning
- Keep moisture up during the day (Spinklers/Micros)
- Cover home plate and mound to keep from drying out





# WATER MANAGEMENT STRATEGIES



# WATER MANAGEMENT

- Deep and infrequent water schedules
- Water during off days
- Hand watering during season
- Utilize micro emitters for leaching
- Use of wetting agents/surfactants
- Solid tine aerification for water movement



# MICRO EMITTER SPRINKLERS





# SEASONAL SCHEDULING

*“Failing to prepare is preparing to fail”* John Wooden

- Utilize slow-release fertilizers (Methylene Urea) on a quarterly basis during growing season to maintain a baseline of growth
- Aerify as often as possible (At least one time core aerification and as many solid tine aerifications as possible)
- With warm season grasses verticut/tickle every 4-6 weeks during summer months
- Sand topdress monthly during growing season
- Apply pre-emergent herbicide applications in early spring and fall for broadleaf & grassy weeds



# CONTACT INFORMATION



- [paulcushing@pcturfpro.com](mailto:paulcushing@pcturfpro.com)
- 858-924-2012
- [www.pcturfpro.com](http://www.pcturfpro.com)