# Infield Skin Maintenance from Little League to the Pros

Bill Deacon NY Mets

#### What is an Infield Skin

- > Sand
- Silt
- > Clay

- >Simple right?
- Why do we have so many problems with bad infields?

#### What Defines a Good Infield Skin?

- Playability
- "cleat in, cleat out"
- > Ability to handle weather

- How do we get here?
- Quality material, good maintenance practices

#### Lets go back to Sand, Silt and Clay

- > This is where you must start
- ➤ Identify what kind of field you are and install a mix that fits you or amend your mix to suit you
- > Look at the Ratios

- > SCR-Silt to Clay Ratio
- ► Ideal 0.5-1

#### Testing

- Know what you are getting
- > Inexpensive
- >SCR, without a test you won't know
- How do you know what to do if you don't know what you have?
- > Be consistent, use someone you trust

#### **Testing**



Hummel & Co., Inc. • 35 King Street • P.O. Box 606 • Trumansburg, New York 14886 • Phone: (607) 387-5694 • Fax: (607) 387-9499 • Email: soildr1@zoom-DSL.com • Web Site: www.turfdoctor.com

#### BALL DIAMOND MIX TEST REPORT FOR NY Mets/Citi Field

REPORT TO:

Bill Deacon Sterling Mets, LP 123-01 Roosevelt Avenue

Flushing, NY 11368

DATE RECEIVED: October 13, 2010

TEST DATE: REPORT DATE: October 13 - 18 October 18, 2010

CONDITION OF SAMPLE: Normal

#### PARTICLE SIZE ANALYSIS (ASTM F1632)

Lab ID No.	Sample	Gravel		Soil Separate			Sieve Size/Sand Fraction Sand Particle Diameter % Retained				
		No. 5 4 mm	No. 10 2 mm	Sand	Silt	Clay	No. 18 V. coarse 1 mm	No. 35 Coarse 0.5 mm	No. 60 Medium 0.25 mm	No. 140 Fine 0.10 mm	No. 270 V. fine 0.05 mm
28239-1	Infield Mix	0.0	4.1	56.8	20.5	22.7	8.7	14.5	21.5	9.7	2.4
Hummel & C	Co, Guidelines <sup>1</sup>	< :	3%	65 - 75		≥ 10%					

<sup>1</sup> In addition, a silt to clay ratio of less than 1.

#### PARTICLE SHAPE/TEXTURAL CLASS /COLOR

Lab ID No.	Sample	Color	Textural Class (USDA)
28239-1	Infield Mix	7.5YR 4/4 Brown	Sandy clay loam

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#### Inspect your mix





#### Why is Maintenance Important

- >#1 complaint I hear from coaches who switch to artificial "can't find anyone to maintain the infield dirt"
- ➤ A well balanced infield soil that suits your specific needs is easier to maintain
- You still need to know what to do with a good infield soil

#### Start of the Season

We have a good infield, what now?

- Rototill
- Lasergrade
- Start the season off right



#### Can't Rototill?

- Get moisture into the dirt if the rototiller isn't working properly
- Try different things, talk to people



# Different Skin, Different Maintenance?

> Yes

> Identify your situation

Some basic practices that I believe should always happen

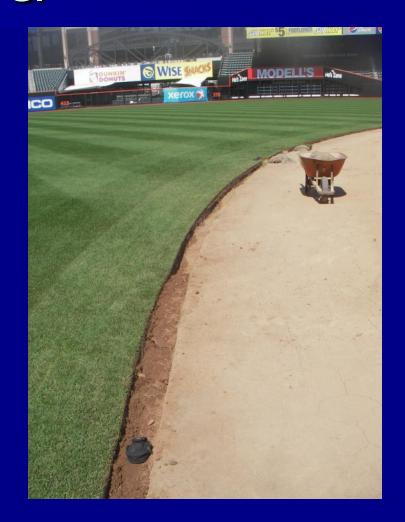
#### Daily Maintenance

- Water, Water, Water
- Adjust the type of infield skin you have to how much water you can put on it
- Remember you can always amend your skin



#### Adjust Skin to your Maintenance Level

- Goes back to knowing who you are and what you need
- My infield is like concrete if you can't water



#### Nail Drag

- Moisture in the skin
- Just deep enough to get rid of cleat marks
- Build it yourself
- > Everyday?
- As often as you feel you need to or have time to



#### Finish Drag

- > Machine
- Steel Drag
- Cocoa Mat
- > Broom

- What I am looking for: smooth finish
- Stay away from the Edges



#### Why are Edges Important?

- > First off, is it an Edge or Lip?
- Lips cause bad hops and injuries
- > Edges are where the grass and dirt meet

- Confidence in approaching the ball
- Most difficult spot to maintain on a baseball field

#### Edges

- > Vacuum
- **>** Broom
- > Rake
- > Who?
- > Teams?



#### Rototilling Edges

- Beginning of the year
- Adding a lot of material
- This is after a soccer game



#### Trimming Edges

> How often

We do it before every homestand

> As often as you can



#### Edges

- After trimming edges
- Rake to help material bond together
- Rake and use material to fill

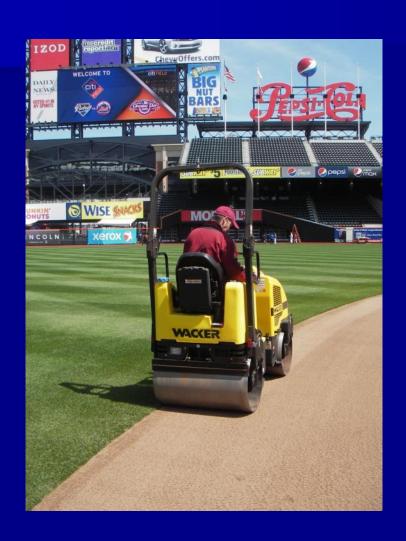


#### Filling Edges

- Moisture just right
- Keep infield mix out of grass
- Use a rake or board to get them level



## Rolling Edges





#### Fixing Edges

- String out area
- Get rid of lips
- Reuse Sod?
- Around infield with a 4' roll of sod \$400 in materials





#### Conditioner

- > How much?
- Just enough to cover the infield skin
- > Why?
- Help keep moisture in the top
- Moisture management tool
- Mulching on day games



#### How to Apply Conditioner

- Spreader
- > Shovels
- > Topdresser
- Just as long as it is even



#### Conditioner

> Rain situations

Good infield skin will take water

- Conditioner is there to absorb the puddles in a rain situation
- Strip excess off



# How Does your Skin Handle Weather

Game ready it takes rain better than if it is dry and cracking



#### What is Game Ready Moisture?

- Moisture meter
- Trying to quantify this with numbers
- > Cork board, push into it but not soft
- How do we get to Game Ready
- > We go through the daily maintenance and final touch is the water

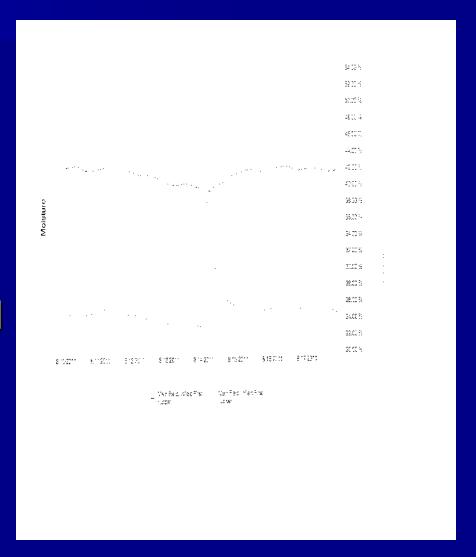
#### Last Year's Hurricane

- Walked on the skin less than 5 hrs after it passed through
- We elected not to tarp the field
- Played a DH on Monday



#### Moisture Management

- > How much water
- Hard to explain without doing it
- Moisture meter readings
- Drainage under infield skin



#### Moisture Management

- Moisture readings
- ➤ I have been using two different instruments and both give very different readings
- ➤ I started doing it to explain it to someone with an Engineering background
- Very little change in my skin once I have the moisture in it

#### Moisture Management

- Took readings at 9:30AM and 4:30PM
- ► May 29<sup>th</sup> 1:10 start time
- >At 9:30 temperature was 72 at 4:30 it was 80
- >20-25 mph winds
- ➤ Moisture at 2" on average went from 24% to 23% on handheld sensor

#### Soft Spots in your Skin

- Happens to all of us
- Pumping
- Dig it out and put in drier material
- Get air into the skin
- Pitchfork, Nail
- Usually happens with a new skin



#### Low Spots



#### Fixing Low Spots

- We check the position areas
- After we play in the rain
- Run a string from front to back
- Mostly hand work
- Remove conditioner, rake, add material, roll



### Fixing Low Spots





- Poorly graded material
- > Entire infield is low
- Mix with high SCR
- No stability in this material



- Mound and homeplate are low
- Why? Not using mound clay
- > Infield mix is low



- No defined edge
- Grass growing problems
- This is actually a high clay infield but it gets no water
- They gave up on the mound







- One artificial field
- Very well graded
- Conditioner everywhere
- No maintenance?



- Entire infield is low
- > High SCR
- Layers



#### High School NJ



- This infield was amended
- > SCR between 0.5-1
- ➤ Sand just over 60%
- Groundskeeper does an outstanding job
- Edges were perfect

# Questions?

The End