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HISTORY OF INFIELD TOPDRESSINGS (CONDITIONERS) & ENGINEERED SOILS

1962- Woodrow Jaffee of the Oil-Dri Corporation teams with Dr. Bill Daniels to introduce calcined clay to the golf industry with a product called TerraGreen Soil Conditioner

Mid-1960s- Oil-Dri began producing larger amounts of calcined clay as an absorbent to reduce rainouts on infields

1970s-early 1980s- heavy marketing by manufacturers (Turface/TerraGreen/ProChoice) created a belief that calcined clay was the answer to infield skin problems

"Condition" the infield soil by tilling in calcined

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Terra-Green

BASEBALL FIELD TOP DRESSING & SOIL CONDITIONER

Reduce game delays by using quick-absorbing Terra-Green!

Terra-Green® products are:

1. ABSORBENT - absorbs and holds excess moisture
2. STABLE - stays in the presence of water and
3. SOFTENS - softens the soil and breaks down clumps of soil
4. CHEMICALS AND PHOSPHATE - contains chemicals and phosphate
5. SOFTENS - softens the soil and breaks down clumps of soil
6. SOFTENS - softens the soil and breaks down clumps of soil
7. SOFTENS - softens the soil and breaks down clumps of soil

KEEP SOIL ON HAND FOR THESE RAINY DAYS. STOCK UP YOUR SOINER AREAS THIS SPRING.

For more information and pricing contact:

southern turf nurseries

The Professional Turf People

P.O. Box 967 - Norcross, Georgia 30091

800.525.7323 770.448.4400

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INFIELD TOP DRESSINGS SERVE MULTIPLE PURPOSES

- Provide a safer sliding surface
- Assist with moisture management
- Aesthetically pleasing

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WHAT IS CALCINED CLAY?

- *MONTMORILLONITE
- *FIRED TO 1100-1400F
- *CLAY STABILIZED
- *HIGHLY ABSORBENT
- *POROUS CERAMIC


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CALCINED CLAY

- *ABSORBS LARGE AMOUNTS OF WATER
- *BREAKS DOWN QUICKLY
- *NEGATIVELY EFFECT INFIELD MIX PROFILE

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NATIVE SOILS

HARVESTED FROM QUARRY OR CREEK BED



LOCALLY SOURCED- HIGH IN SILT



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ENGINEERED SOILS


BALANCED SAND, SILT & CLAY



LEVEL OF MAINTENANCE DETERMINES CLAY CONTENT



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ENGINEERED SOILS

- *PRECISE MEASURING AND BLENDING
- *REGULAR TESTING OF RAW MATERIALS
- *KNOW EXACTLY WHAT YOU ARE GETTING

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ENGINEERED SOILS

STAY IN PLACE AND WILL NOT MIGRATE; STRUCTURALLY STABLE WHEN WET; LITTLE IF ANY DUST

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USGA IMPACT

ROOT ZONE SPECS STARTED IN THE 1960'S REPLACED NATIVE SOIL PUSH UP GREENS

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ENGINEERED SOILS

*ARE NOW THE NORM, NOT THE EXCEPTION

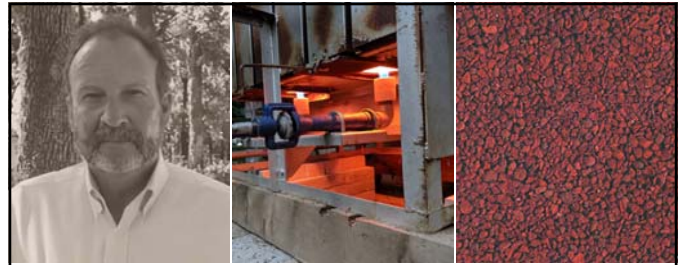
*TRICKLING DOWN TO HIGH SCHOOL AND RECREATIONAL LEVELS

*CAN BE COST PROHIBITIVE

NATIVE SOIL- \$0.70-1.00/SQ. FT.

ENGINEERED- \$2.50-4.00/SQ. FT.

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VITRIFIED TOPDRESSING

INTRODUCED BY TEXAS INDUSTRIES IN 1989; FIRED TO 2000F; DIAMOND PRO PROVIDES A CHOICE

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WHY EXPANDED SHALE?

*A DECADE OF USING A CALCINED/VITRIFIED MIX

*ENGINEERED SOIL HEAVILY SILTED DESPITE ANNUAL TOPDRESSING STRIPPING AND ADDING A FRESH LOAD

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SHALE ASPIRATIONS

BETTER MOISTURE TO BASE SOIL



LESS PARTICLE BREAKDOWN/LESS SILT



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SHALE ASPIRATIONS

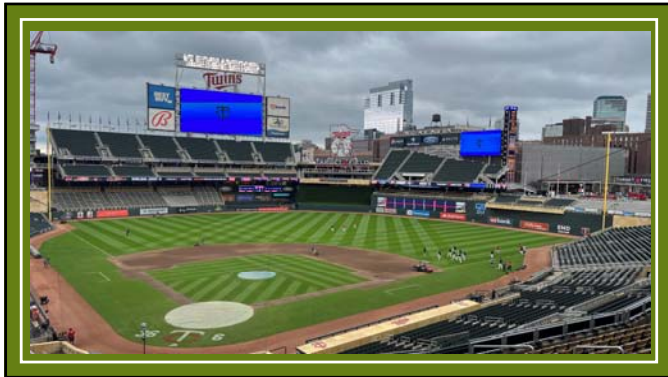
LESS MATERIAL MIGRATION



LESS PRODUCT/SAVE \$\$



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SHALE APPLICATION

MARCH 30- SCARIFICATION



SOIL SURFACTANT APPLICATION



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SHALE APPLICATION

FOUR TONS- BULK SACKS



DUMP & SCOOP INTO TOPDRESSER



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SHALE APPLICATION

COVERAGE- 3-4 TONS= 1/8-1/4"

NO ROLLER- SPREAD & WATER



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HOW WOULD EXPANDED SHALE REACT IN RAIN SITUATIONS?

*A DERECHO SET THE TONE

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TARGET FIELD- MINNESOTA TWINS

CALCINED ADDED IN SPRING; EXPANDED SHALE ON SKIN; CALCINED MOUND & PLATE

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EXPANDED SHALE FEEDBACK

- *"FANS- "LOVE THE BROWN COLOR"
- *"PLAYERS- "CONTRAST OF BALL ON DIRT"
- *"FAST ROLL- TRUE HOPS"
- *"DIFFERENT"
- *"TOP DRIES OUT FAST"
- *"FAST SLIDING"

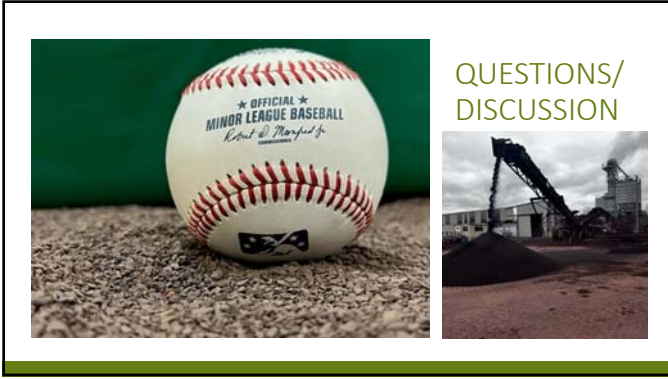
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CONCLUSIONS

- 1)USED LESS WATER
- 2)MINIMAL MIGRATION
- 3)LESS EDGE BUILD UP
- 4)LESS MATERIAL-LESS \$\$
- 5)LESS ROLLING
- 6)COLOR A HIT!
- 7)TRUE HOPS/FOOTING

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QUESTIONS/
DISCUSSION