
BEST MAINTENANCE PRACTICES FOR MIXED SURFACE PLAYING FIELDS

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UNIVERSITY OF MICHIGAN ATHLETICS



ATHLETICS

UNIVERSITY OF MICHIGAN

MY EXPERIENCE

Jason DeMink, CSFM
Sports Turf Specialist/University of Michigan Athletics

- Graduated from Michigan State's Sport Turf Management Program
- Former Second Assistant, Boston Red Sox
- Head Groundskeeper, University of Michigan Baseball and Softball
- CSFM, 2013



UNIVERSITY OF
MICHIGAN



TODAY'S OBJECTIVES

- Gain an understanding of how to remove clay from synthetic turf.
- Learn how to resolve common wear areas on college athletic fields.
- Improve knowledge of proper maintenance and preventative techniques of synthetic fields.
- Obtain information regarding weather related issues of mixed surface playing fields.



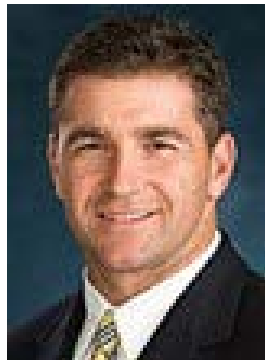
WILPON COMPLEX



UNIVERSITY OF MICHIGAN BASEBALL/SOFTBALL TEAMS

Baseball

- Head Coach: Erik Bakich
- 2019 Record: 50-22 (22-4 at home)



Softball

- Head Coach: Carol Hutchins
- 2019 Record: 45-13 (17-2 at home)



ALUMNI FIELD 2008



ALUMNI FIELD 2017



EVOLUTION OF ALUMNI FIELD

2007

- Clay infield: 80% sand, 20% clay (2007)
- Supina bluegrass outfield
- 4 inch Drainage install arch
- Native-soil based outfield
- 2008: Hilltopper was installed on the infield.

2014

- Hilltopper clay still in infield
- Outfield replaced by AstroTurf
- 70% silica sand 30% crumb rubber
- Warning track 80% sand 20% crumb rubber



RAY FISHER STADIUM 2012



NEW HEAD BASEBALL COACH- 2013

- “Starting in the fall of 2014, visitors to Ray Fisher Stadium, home of the Michigan baseball team, will no longer be able smell the fresh cut grass or hear the crunch of the dirt underneath player’s spikes. This is because Michigan will replace its current natural field at the Wilpon Complex with an all-turf surface”.
- "Thank God for us, we are actually getting a turf field next year at the end of the summer, which will be a huge boost for us," said Michigan coach Erik Bakich on WTKA.



RAY FISHER STADIUM 2016



EVOLUTION OF RAY FISHER STADIUM

2008

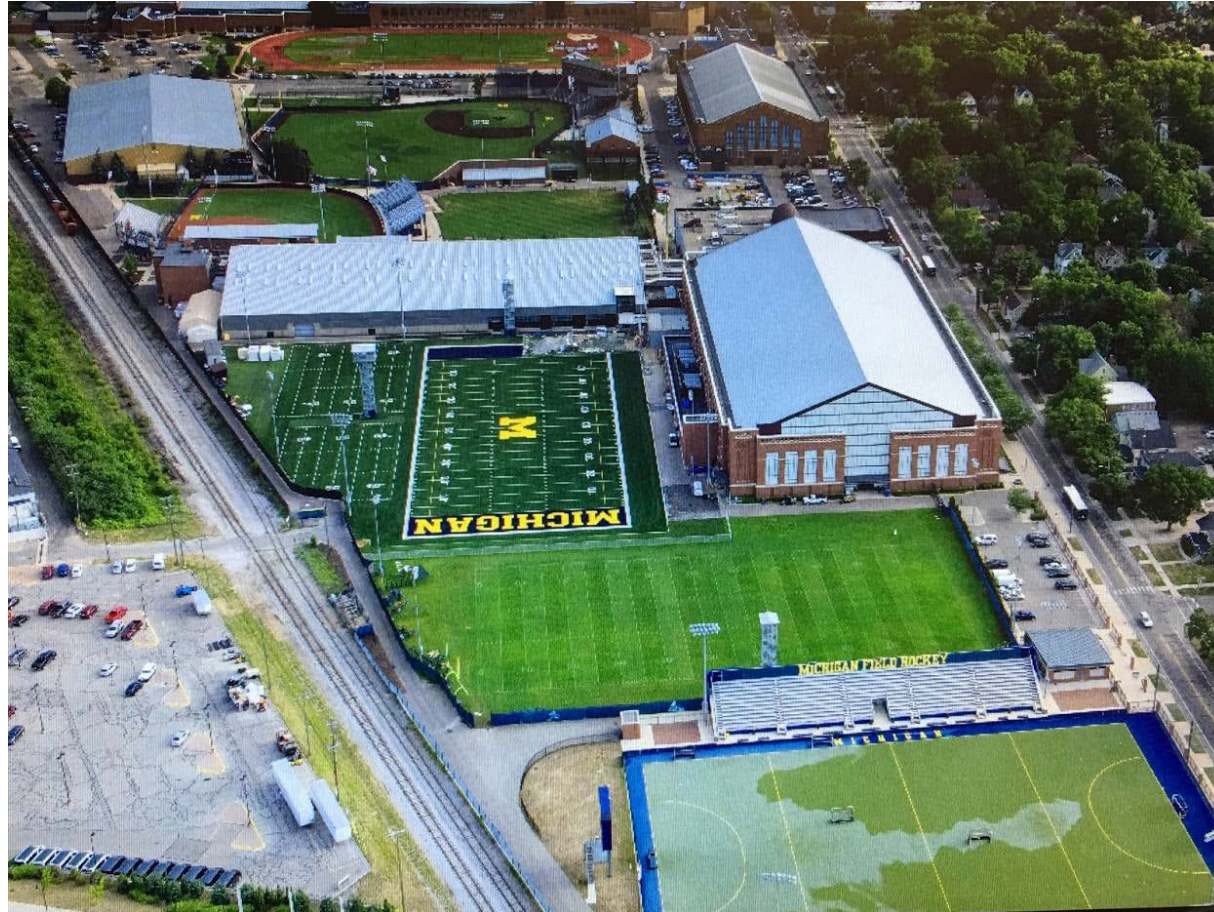
- Supina Bluegrass infield and outfield
- Duraedge infield mix
- Hilltopper mound and home plate clayed areas
- Crushed red brick warning tracks

2014

- Synthetic turf infield and outfield
- 70% sand 30% crumb rubber outfield
- 80% sand 20% crumb rubber infield (very hard)
- Synthetic turf warning track
- Mound is still Hilltopper clay (2018- now the mound is synthetic turf)
- Plate area is all synthetic turf



PRACTICE FOOTBALL FIELDS/ FIELD HOCKEY



LASER GRADING AND ADDING MATERIAL





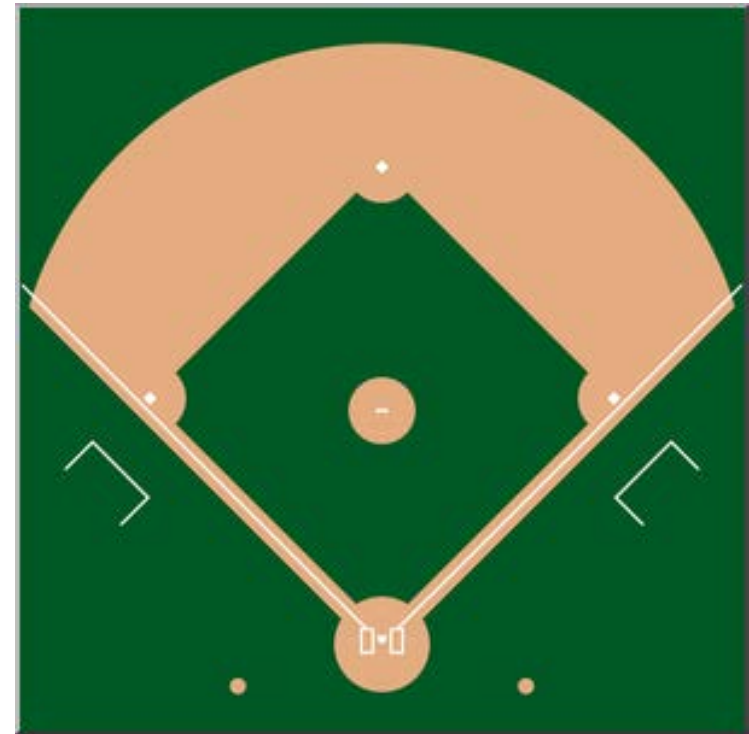
OVERUSE

- Over 200 games in 5 weeks (summer tournaments)
- 30 home games (regular season)
- Practices (daily)
- High School rentals (15 additional)
- Little league/Travel Baseball over 50 games
- Club Baseball/Softball (daily)
- And anything else they can rent it out for...



COMMON WEAR AREAS

- First Base lead off
- Second base: front and back
- Outfield spots
- Shortstop
- The dish



FIRST BASE



AFTER FIVE YEARS OF PATCH REPAIRS



MORE EXAMPLES OF FIRST BASE



SECOND BASE



TURF BRUSH DAMAGE



- Student worker decided to not remove bases when using the turf drag.
- He stuck the landing!!!



LEADING INTO SECOND BASE.



THE DISH. #MOSTPROBLEMS



HOLES AT THE DISH



CATCHER'S BOX PRE-PATCH



SPIKES



CATCHER'S BOX



CLAY IN TURF...

The evil of all evils!!!









GETTING CLAY OUT



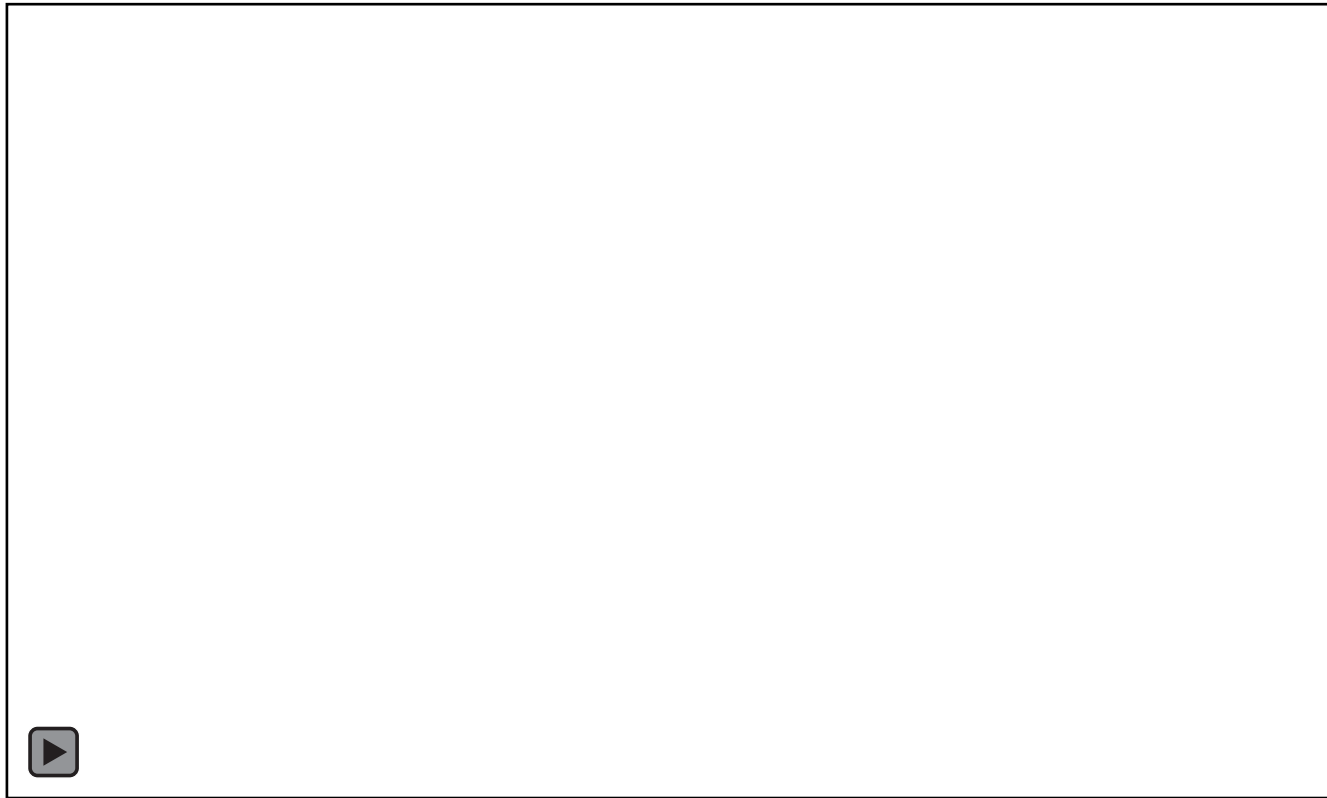
- Power washing?
- Picking by hand?

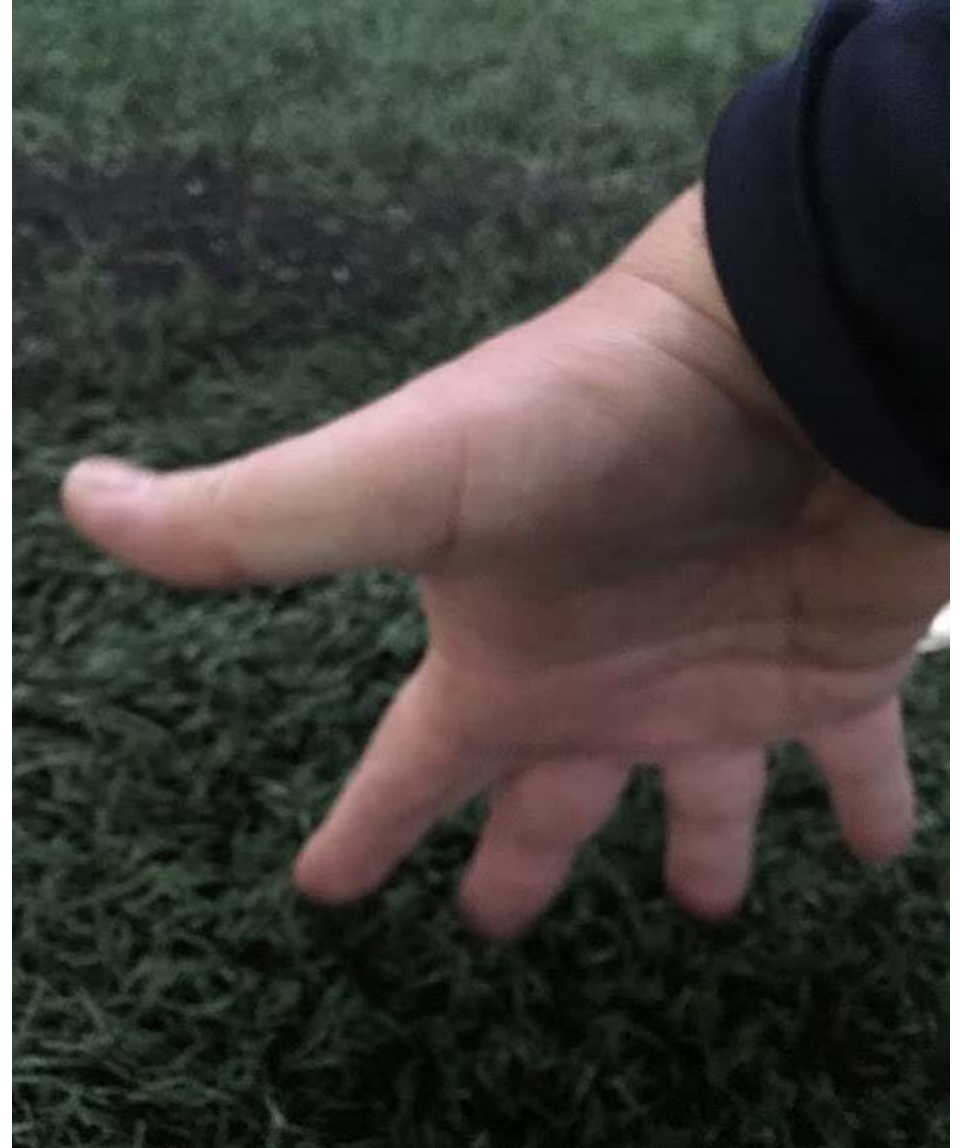
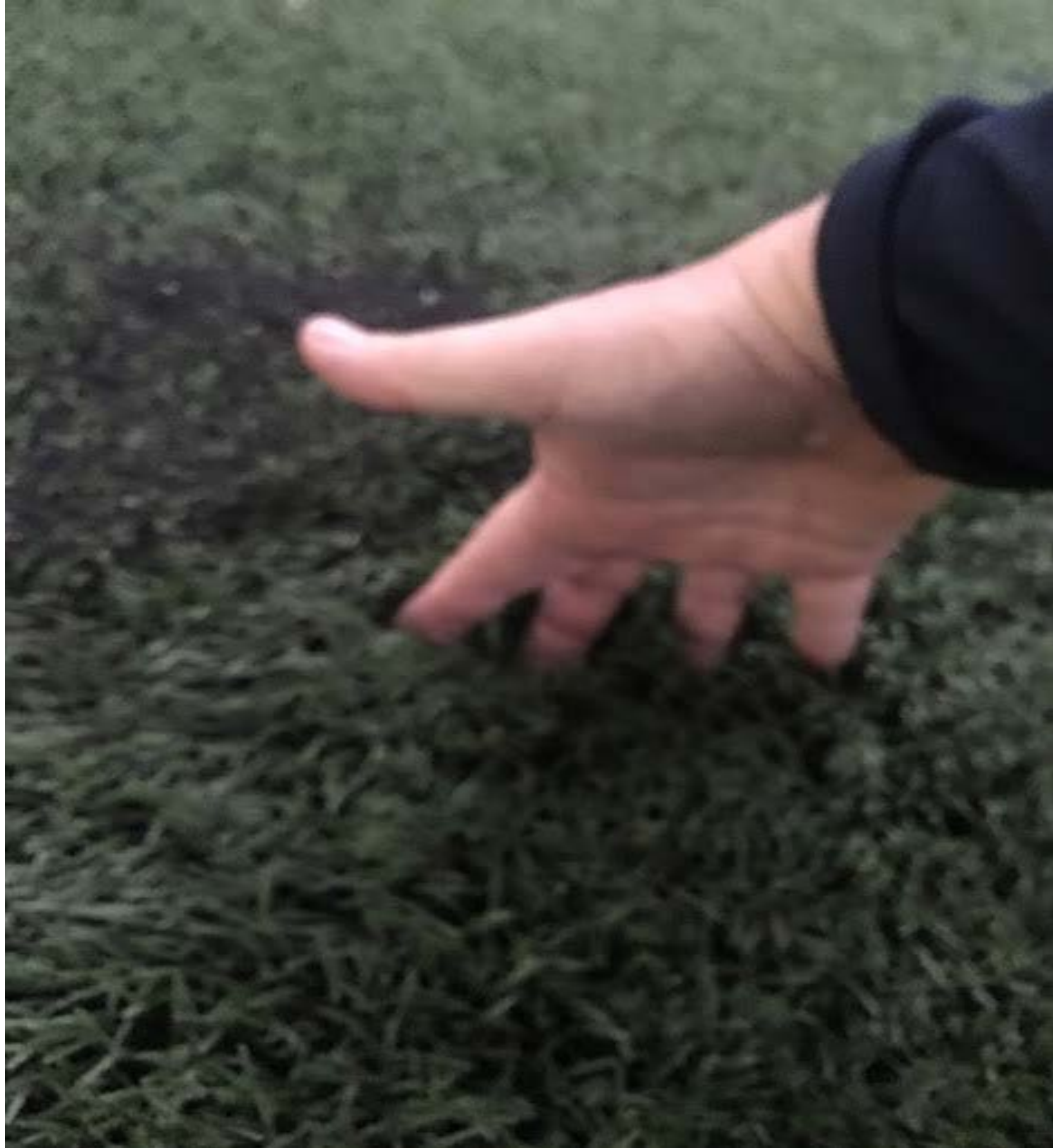
AFTER POWER WASHING

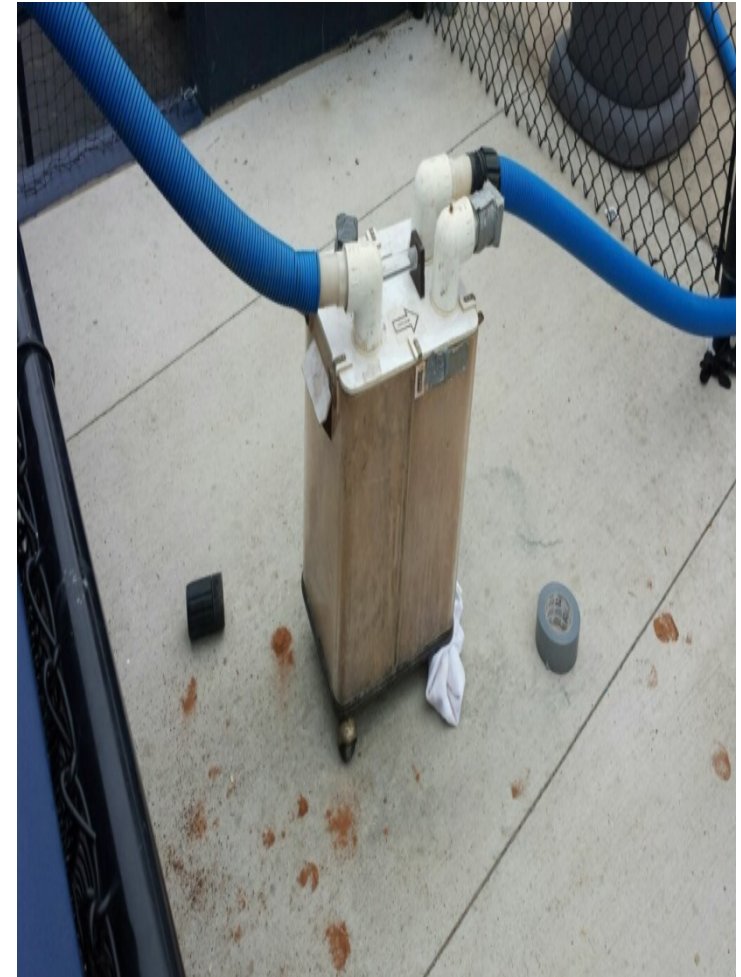


CARPET CLEANER TEST AREA

















PORTABLE MOUND



- 2017 thru 2018
- Lasted one season
- Frequently had to replace the turf panels





MOVED TO A PERMANENT MOUND FOR THE
2018 SEASON



FINISHED TEMPORARY MOUND



CLAY BUILDUP IN BULLPENS















LIPS







CURB AND SETTLING





NO ONEWAY IS RIGHT

- Back pack blower
- Brooms
- Hose
- Rakes
- Turf vacuum



HOURS LATER..





BACK OF INDOOR MOUNDS SOFTBALL



SOFTBALL INDOOR MOUNDS



SOFTBALL LANDING AREAS



BEHIND MOUNDS





SNOW REMOVAL –YAY! WINTER!





INFIELD ALWAYS FIRST







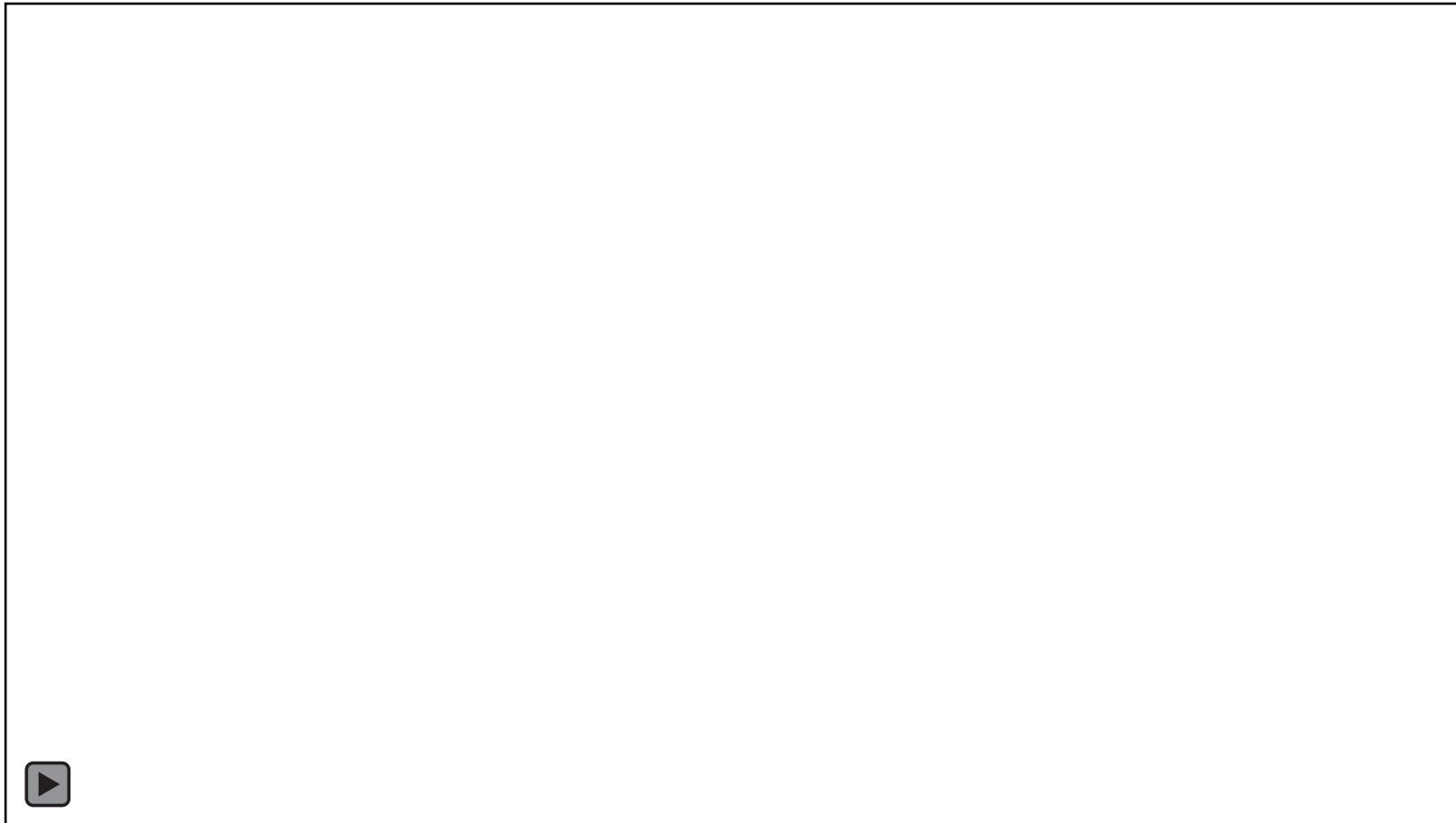
SOFTBALL

Clay infield two plies





BIG TEN NETWORK PROPS





RECOGNITION IS ALWAYS AWESOME



Michigan Baseball  @umichbaseball · Apr 15

While we wait, we'd like to say a special thank you to our awesome facilities staff for making our field playable today! We appreciate you!



MOUND REPAIR



- Freezing temp we need to make a mound repair in total mound was out of commission
- Torpedo heaters
- Turf repairs on mound in winter. Trying to get glue to stick.
- Damage happens from snow plow. Need to fix before team gets out there. Usually have less than 24 hours.



AND THE CLAY ALWAYS COMES BACK



GRASS AND SYNTHETIC TURF





- Crumb rubber infiltrating turf
- Heat stress where turf and turfgrass meet
- Transition areas

HEAT DAMAGE AND TRANSITION PICTURES



RICE UNIVERSITY

Bermuda grass



CLAY AND GRASS IN TURF



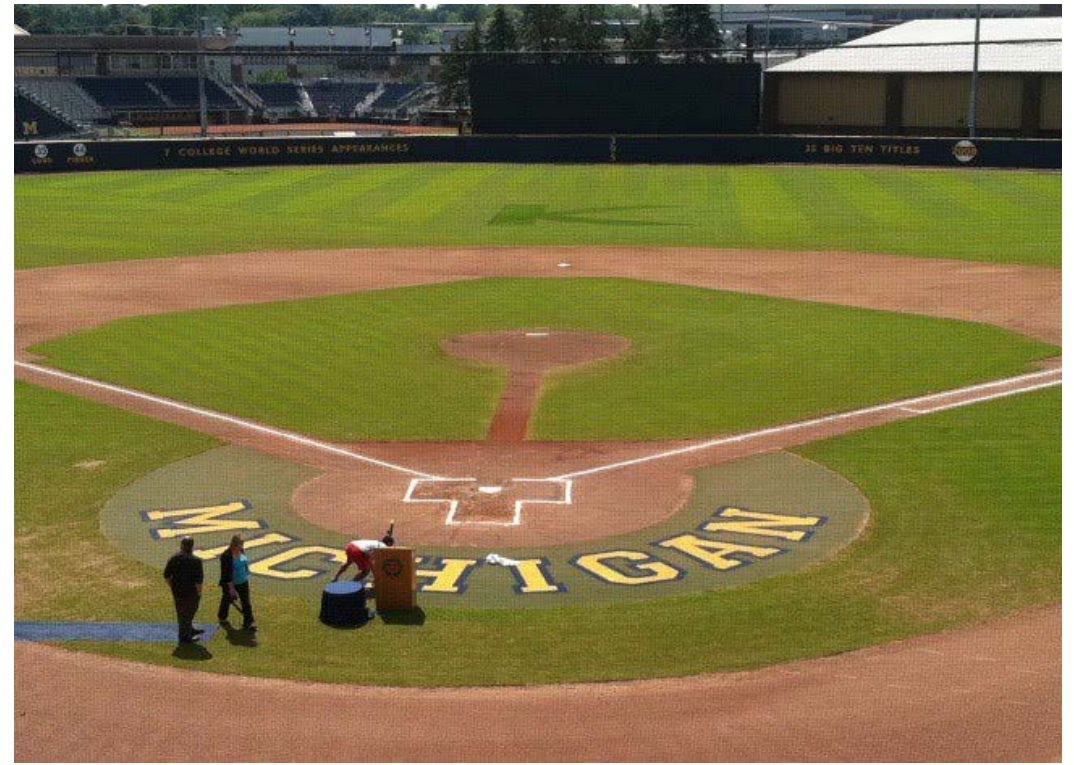
TRANSITION



HALO



BEGINNING AND END OF SEASON



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THANK YOU!!



SportsTurf
MANAGERS ASSOCIATION

