

**Penn State Proud**

Penn State has a long tradition of training turfgrass managers. There are currently 240 resident students pursuing undergraduate degrees in turfgrass science at Penn State University. Many more students pursue a degree through Penn State's World Campus, an online education program where students can receive a Bachelor of Science Degree in Turfgrass Science via the Internet.

This summer Penn State students are interning at various golf courses and

sports venues around the world. In the sports turf arena Penn State has interns at Fenway Park in Boston, Baltimore Ravens in Maryland, Lakewood Blue Claws in New Jersey, Milwaukee Brewers in Wisconsin, Lebanon Valley College in Pennsylvania, and at Beaver Stadium on the Penn State Campus, among many others.

Of particular note is Aaron Fineberg, one of the SAFE Scholarship winners from last year. Aaron will be interning with Tony Leonard of the Philadelphia Eagles. Along with the everyday maintenance and preparation of the facility for the upcoming season, Aaron's internship project will consist of a study of the chemical control of *Poa trivialis* in high-cut stands of Kentucky Bluegrass.

The objectives of the study include evaluation of the side effects of chemical compounds on the varying cool season turfgrass species present at the time of application, the time needed to see results, and how quickly reseeding can occur.

Having undergraduate students aiding in research in the field gives researchers valuable information regarding real world application of our findings and allows the student and practitioner a greater understanding of the scientific process.

**Research Overview**

*By Jim Brosnan, Ph.D candidate*

Little research data exists on the safety or playability of baseball surfaces, especially the skinned portion of the infield. Baseball field managers

# TIFSPORT

## Why Does This Certified Bermudagrass Variety Make Such Good Sense for Sunbelt Playing Fields?

**Closer Mowing Heights**

Research conducted in Tifton GA shows that TifSport can tolerate closer mowing heights than Tifway and Midiron. With TifSport, mowing fanatics can mow away to their heart's content.

**Superior Turf Density**

TifSport has a greater density than Tifway - about a 1 point difference on a 10 point scale. And it's about 3 points better than common bermudagrass.

**Good Lateral Growth**

TifSport is more aggressive than genetically pure Tifway, especially during the cool weather months. This may account for TifSport's rapid grow-in and repair time.

**Superior Sod Strength**

TifSport's superior sod strength means quicker installation with less waste, and that's got to be good for your bottom line.

**Excellent Traffic Tolerance**

TifSport's turf density, sod strength and good lateral growth rate give it a high ranking for traffic tolerance..

**Upright Leaf Blade Orientation**

TifSport's leaf blade stiffness is being touted by many turfgrass professionals. With TifSport players seem to get better bounces.

**Impressive Leaf Texture**

TifSport has a similar leaf texture to Tifway, and a finer leaf texture than most other grasses. TifSport will deliver excellent footing for sports fields of all stripes.

**Dark Green Color**

Pastel green is passé. TifSport's dark emerald green color will make your fields the envy of the neighborhood.

**Drought Tough**

All grass has to have water, but TifSport can help you make it through those summer water restrictions. It stays healthier and recovers faster from drought than most other bermudas.

**Cold Tolerant**

TifSport has expanded the northern limit for warm season bermudagrasses. It has survived multiple winters as far north as Stillwater OK & Lexington KY.

**Pest Resistant**

Research has shown that mole crickets just plain don't like TifSport. That's just one more reason why you should.

**Vigorous Root System**

This inside view of a typical TifSport plug shows TifSport's impressive root system, stolons and rhizomes.



For a List of Licensed TifSport Growers Visit:  
**[www.tifSPORT.com](http://www.tifSPORT.com)**



place the majority of their effort into maintaining adequate moisture in the skinned areas of the infield. It remains unknown though, how changes in moisture content of this surface affect not only the ball to surface interaction, but the player to surface interaction as well.

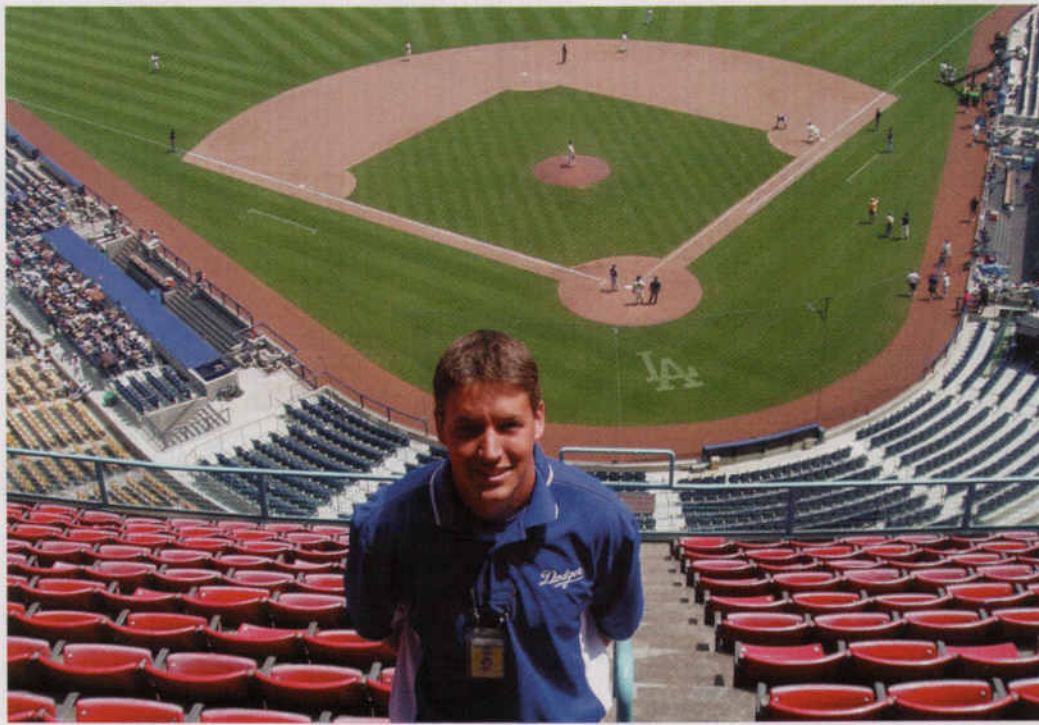
As a part of my dissertation research at Penn State University a survey of baseball fields across the United States will be conducted. Fields at all levels of competition will be evaluated for surface hardness and ball bounce. Surface hardness will be measured using both a Clegg Impact

Soil Tester and the ASTM F-355 method.

Ball bounce will be evaluated with an apparatus I developed here at Penn State named PennBounce. This apparatus quantifies ball bounce by measuring the coefficient of restitution (COR) for a playing surface. COR is defined as the ratio of a baseball's velocity after impact with the surface as a proportion of its velocity prior to impact. The apparatus uses infrared chronographs placed twelve inches from the testing surface in an arrangement to obtain the inbound and outbound velocities of baseballs propelled at varying speeds and angles to the surface.

Information regarding soil texture, soil moisture, cutting height, and thatch layer will also be collected. The survey will allow for average baseball field surface conditions to be determined at varying levels of competition.

Upon completion of the survey, field plots will be created at the Joseph Valentine Turfgrass Research Center, University Park, PA. Skinned infield plots, natural turfgrass plots, as well as in-filled synthetic turfgrass plots will be evaluated in order to determine the effects of various management practices have on altering the playability and safety of



these surfaces. Specifically, the effects of moisture and inorganic amendments (i.e. calcined clay) on skinned areas will be investigated.

This project will provide an understanding of how maintenance procedures used in baseball field management effect the playability and safety of the field. It will also provide input into the relevancy of commonly used material testing methods. By gauging actual strain on set forth onto the player due to surface type and correlating that information will values obtained through traditional testing methods (Clegg Impact Tester, etc.), we can begin understand how accurately the evaluation tools we are equipped with today will predict field safety in the future.

#### Sports turf at Ohio State

By Pamela Sherratt

The Buckeye Sports Turf program at The Ohio State University is now in its fourth year. During that time we have been striving to improve our sports turf research, teaching and extension efforts.

Historically, most of the turfgrass science majors work toward a career in the golf course industry. Out of the 100+ majors it was not uncommon to have just 2-3 that wanted to go on to be a sports field manager. Today, there are 107 turfgrass

# REMOVABLE PAINT FOR SYNTHETIC AND GRASS FIELDS



## TEMP-LINE



Now you can add or remove football, soccer or lacrosse lines and logos to meet all your event needs.



NFL Approved Vendor

Call (800) 677-7930  
for a free sample kit

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

Circle 156 on card or [www.oners.ims.ca/5062-156](http://www.oners.ims.ca/5062-156)