He says, "There is no ideal grass for the transition zone. You make a choice and then make it work. With our Bluegrass field, I work with different varieties to limit susceptibility. I've added quite a bit of Midnight to the field in overseeding each year. At some point, I'll probably want to replace the turf with all new varieties taking the best of what's available. With the disease pressure my most difficult challenge; water management is the most important aspect of the overall maintenance program. In 2002, we had nearly 2 months solid of 90-plus degrees and high humidity. There were just a few areas where the turf was a little thin and stressed, but only our crew was aware of those spots. We know there will be times when things don't look the best, but we want to keep those as few and far between as possible."

These results were achieved even though Louisville Slugger Field played host to those 100 events between March 30 and October 12, 2002. Along with the 72 home games of the Louisville Bats, a Triple A affiliate of the Cincinnati Reds, there were eight college and high school games, the Bats team workouts, six days of clinics/try-out camps, four privately sponsored batting practices, a cheerleading competition, a 2-day concert, two celebrity softball games, a spring training game featuring the Reds vs. the Baltimore Orioles, three kids’ campouts on the field, each of which featured tents, a 5K run and two pre-game baseball clinics.

Nielsen’s staff consists of a full-time assistant, three full-time seasonal employees, and one game day employee. He credits the following for their assistance in earning the Field of the Year honors: Brad Smith, Pete Lockwood, Ray Sayre, Andy Carden, Kyle Smith, Mark Piercy, Sonny Collins, and Erik Hagen. He also has a crew of four part-time employees who take care of the extensive landscaping surrounding the stadium. He’s adopted some innovative measures to make this all work.

The outside landscape crew has a trailer loaded with all the equipment and supplies they need for maintenance. That simple step eliminates the time lost going into the stadium maintenance area for materials. The cart is restocked as needed after each work session. Nielsen plans to develop even more extensive plantings and flowerbeds within the next couple years.

The second season at the field, the crew took on the task of adding more drainage in the warning track. This took major excavation at each spot to install 4-inch pipe from an inch below the warning track surface to the connection point with the subsurface drainage tiles. The original drains were set 6 inches below the warning track surface. The crew also extended them to within 1 inch of the surface. There are now 35 drains spaced around the warning track, each one equipped with a short whisker pull on the drain's valve box cover to allow quick and easy access.

He’s also experimented with raising and lowering the turf height of cut, and with keeping it at one level throughout the season. He’s determined the plant strength and vigor is greater and shearing is reduced with keeping the same height of cut throughout the season.

One of the greatest time and money savers is the use of fans to float the tarps. Nielsen says, "We originally purchased two large oscillating fans to create air movement around home plate and the apron. During the second season here, we started experimenting with the fans and the tarp. We’ve now removed the oscillators and mounted the fans on wheels so they can be maneuvered more easily and set them at the height and angle that fit our needs. With the tarp pulled tight, we position the fans at the first and third base sides. When conditions are windy or the field is saturated, we anchor the corners of the tarp with equipment as well as the pins."

"The fans actually float the tarp above the surface of the field and keep the air circulating beneath it. Rain drips off the tarp as it falls, rather than forming puddles on top of it. Occasionally, if rainfall is heavy, we need to consolidate the water on the surface toward the back of the tarp and squeegee it off. The turf doesn't suffer from the suctioning effect of the tarp on the grass. We have the standard 170-foot by 170-foot tarp. By using the fans, we’ve found we can remove the tarp with a four or five person team, rather than 12 to 14.
Maintenance Program- Louisville Slugger Field

Fertilization (Granular)
• Magnesium - twice in the spring, twice in the fall
• Sulfate of potash - twice in the spring, twice in the fall
• 12-3-8 Organic - once in the spring, once in the fall

Fertilization (Liquid)
• Bi-weekly program - carbohydrates, complete amino acids, mature proteins,
• Micronutrients, biostimulants, 8 % Calcium, 20 % soluble potash, and
• 18-0-3 or 4-4-16
• As needed - 12-4-5.25
• Once a month during the active growing season - chelated calcium, liquid manganese, dethatcher, liquid humic acid
• Spring and fall - 10-45-8 (auxiliary nutrient N-P-K if needed)

Weed Control
• MSMA post-emergent for grassy weeds
• 18-4-10 with pre-emergent herbicide (when soil temperature reaches 55 degrees)
• Postemergent for broadleaf weeds

Fungicide
• Preventive applications March through October, curative applications when disease is present - fungicides used vary with season, matched to degree of potential susceptibility and products rotated to reduce possibilities of resistance

Insecticide
• Preventive - June 1 and August 30 - as needed if insects present

Wetting Agent
• Used to aid water efficient for irrigation and syringing

Mowing
• Height of cut maintained at 1-1/4-inch all season
• Frequency - every day when team home, every other day when team on the road

Aerification
• Hollow tine - once in spring, twice in fall, if possible - drag in cores and top dress 1/16-inch
• Solid tine - each month during playing season - topdressing combined, if workable

Infield, Mound and Plate Maintenance
• Till infield 6-inches deep in spring and midway through the season. Float to level the infield, roll with 1-ton roller
• Compact infield with 1-ton roller every other day when games are being played
• Cover with 1/4-inch soil conditioner
• Water clay deeply to keep clay moist
• Screen infield with field rake for pre-game and post-game grooming
• 5th inning drag using 4-2-foot by 8-foot stiff mat drags
• Nail drag infield during season as needed
• Patch mounds and plates daily with clay

Lip Prevention
• Rake and sweep out edges after each game
• Blow out edges with hose after each home stand
• Edge field every third day

Winter Maintenance
• December - cover infield and aprons with turf blankets
• Blow out irrigation system
• Apply fungicide
• Service and repair equipment

Miscellaneous
• Take soil test three times per year
• Conduct tissue test twice per year
• Overseed in fall using 400 pounds Midnight bluegrass seed
• Pre-germinate seed during season for use as needed - varieties used: Ram, Georgetown, 1757 and Midnight

Infield, Mound and Plate Maintenance
• Till infield 6-inches deep in spring and midway through the season. Float to level the infield, roll with 1-ton roller
• Compact infield with 1-ton roller every other day when games are being played
• Cover with 1/4-inch soil conditioner
• Water clay deeply to keep clay moist
• Screen infield with field rake for pre-game and post-game grooming
• 5th inning drag using 4-2-foot by 8-foot stiff mat drags
• Nail drag infield during season as needed
• Patch mounds and plates daily with clay

Lip Prevention
• Rake and sweep out edges after each game
• Blow out edges with hose after each home stand
• Edge field every third day

Winter Maintenance
• December - cover infield and aprons with turf blankets
• Blow out irrigation system
• Apply fungicide
• Service and repair equipment

Miscellaneous
• Take soil test three times per year
• Conduct tissue test twice per year
• Overseed in fall using 400 pounds Midnight bluegrass seed
• Pre-germinate seed during season for use as needed - varieties used: Ram, Georgetown, 1757 and Midnight

Infield, Mound and Plate Maintenance
• Till infield 6-inches deep in spring and midway through the season. Float to level the infield, roll with 1-ton roller
• Compact infield with 1-ton roller every other day when games are being played
• Cover with 1/4-inch soil conditioner
• Water clay deeply to keep clay moist
• Screen infield with field rake for pre-game and post-game grooming
• 5th inning drag using 4-2-foot by 8-foot stiff mat drags
• Nail drag infield during season as needed
• Patch mounds and plates daily with clay

Lip Prevention
• Rake and sweep out edges after each game
• Blow out edges with hose after each home stand
• Edge field every third day

Winter Maintenance
• December - cover infield and aprons with turf blankets
• Blow out irrigation system
• Apply fungicide
• Service and repair equipment

Miscellaneous
• Take soil test three times per year
• Conduct tissue test twice per year
• Overseed in fall using 400 pounds Midnight bluegrass seed
• Pre-germinate seed during season for use as needed - varieties used: Ram, Georgetown, 1757 and Midnight

Infield, Mound and Plate Maintenance
• Till infield 6-inches deep in spring and midway through the season. Float to level the infield, roll with 1-ton roller
• Compact infield with 1-ton roller every other day when games are being played
• Cover with 1/4-inch soil conditioner
• Water clay deeply to keep clay moist
• Screen infield with field rake for pre-game and post-game grooming
• 5th inning drag using 4-2-foot by 8-foot stiff mat drags
• Nail drag infield during season as needed
• Patch mounds and plates daily with clay

Lip Prevention
• Rake and sweep out edges after each game
• Blow out edges with hose after each home stand
• Edge field every third day

Winter Maintenance
• December - cover infield and aprons with turf blankets
• Blow out irrigation system
• Apply fungicide
• Service and repair equipment

Miscellaneous
• Take soil test three times per year
• Conduct tissue test twice per year
• Overseed in fall using 400 pounds Midnight bluegrass seed
• Pre-germinate seed during season for use as needed - varieties used: Ram, Georgetown, 1757 and Midnight
Introducing the Toro® 570 Variable Arc Nozzle. There’s nothing quite like seeing your vision become reality. And to make sure you get exactly the right arc to match your terrain, use the Toro VAN. It’s easily adjustable from 0° to 360°, comes in 5 sizes and fits every sprinkler body in the reliable 570Z Series. To help your dreams come to life, specify the Toro VAN. For more information, contact your Toro distributor or visit us at toro.com.

Circle 105 on card or www.oners.ims.ca/2077-105
"There's great cooperation throughout the organization. I have input on field use situations and my requests are respected."

"I was really excited about the opportunity to tackle the construction and weather-related challenges in Louisville," says Nielsen.

Nielson extends equal respect to his staff-and they earn it. He seeks out turf students with the ability, heart, and dedication to become sports turf managers and puts them through the ropes on the crew. He says, "You have to have some vested interest in the job or you won't be committed to the 14- to 15-hour workdays. I really feel that during the two to three years an individual spends as part of our staff they should have the opportunity to learn all we have to teach them. If they have the drive to go with the skills, they'll be equipped to start in a head position of their own. I believe it's all part of the mentoring process we, as sports turf managers, owe the industry. My goal is to have each of my assistants move on to head positions."

And he has a good start on that. Jake Tyler, his first assistant is now at the head spot with the Binghamton Mets. Chris Pearl holds the top spot with the Nashville Sounds; Kyle Lewis with the Norwich Navigators; and Pete Lockwood with the Eugene Emeralds.

It's the commitment by Nielsen and his crew to excellence in overall field quality, safety, playability, and appearance the earned the Louisville Slugger Field STMA Field of the Year honors.
It's hard to go wrong when you're choosing between two new warm-season turfgrass varieties as outstanding as SeaIsle 1 Seashore Paspalum and TifSport Bermudagrass. These two new patented cultivars can only be sold as certified sod or sprigs, and only by a member of a select group of licensed growers. Our top-quality producers have agreed to a stringent set of production practices. This means the grass you buy from a Florida, Georgia or South Carolina grower is going to be the same grass you buy from a Texas or California grower. And it'll be the same 10 years down the road. If you're involved with the installation or on-going maintenance of a sports field, you'll really appreciate how these turfgrasses compare to Tifway 419 and the other older varieties in use today.

While SeaIsle 1 is similar in texture and wear tolerance to hybrid bermudas, it may offer a number of important advantages. First and foremost, it can handle multiple stresses: prolonged drought, high salt levels, waterlogging and extremely high or low soil pH levels. Secondly, SeaIsle 1 can tolerate most types of alternate water sources, including wastewater, effluent, gray water, brackish water, and even ocean water. It requires less irrigating, less fertilizer and only minimal pesticide applications when compared to other warm-season cultivars. It also handles cloudy conditions and the low light intensity of domed stadiums extremely well. That's why it was such a good choice for the Houston Astros' new field.

Take a look at its pluses and specify SeaIsle 1 for your new sports field or renovation project.

Looking for a bermudagrass that can stand up to the stress and demands of big-time sports, to the wear and tear of football and soccer cleats, to the punishment of baseball slides, dives and spikes? Relax; you've found it. TifSport also has outstanding color, disease resistance and cold hardiness. In fact, TifSport is performing with flying colors in stadiums as far north as FedEx Field in Landover, Maryland, on up to the Ravens' PSI Net Stadium in Baltimore. If you're a sports turf manager, you know what's important for a playing field - outstanding density, turf strength and turf quality. You need a grass that recovers quickly from day-in-and-day-out abuse. That's just what TifSport has been bred to do. Be sure to ask for TifSport by name. It makes an attractive, dark green turf.

Fielder's Choice

While SeaIsle 1 is similar in texture and wear tolerance to hybrid bermudas, it may offer a number of important advantages. First and foremost, it can handle multiple stresses: prolonged drought, high salt levels, waterlogging and extremely high or low soil pH levels. Secondly, SeaIsle 1 can tolerate most types of alternate water sources, including wastewater, effluent, gray water, brackish water, and even ocean water. It requires less irrigating, less fertilizer and only minimal pesticide applications when compared to other warm-season cultivars. It also handles cloudy conditions and the low light intensity of domed stadiums extremely well. That's why it was such a good choice for the Houston Astros' new field.

Take a look at its pluses and specify SeaIsle 1 for your new sports field or renovation project.

Looking for a bermudagrass that can stand up to the stress and demands of big-time sports, to the wear and tear of football and soccer cleats, to the punishment of baseball slides, dives and spikes? Relax; you've found it. TifSport also has outstanding color, disease resistance and cold hardiness. In fact, TifSport is performing with flying colors in stadiums as far north as FedEx Field in Landover, Maryland, on up to the Ravens' PSI Net Stadium in Baltimore. If you're a sports turf manager, you know what's important for a playing field - outstanding density, turf strength and turf quality. You need a grass that recovers quickly from day-in-and-day-out abuse. That's just what TifSport has been bred to do. Be sure to ask for TifSport by name. It makes an attractive, dark green turf.

Circle 106 on card or www.oners.ims.ca/2077-106
Infield practices

Here are some tips from the trenches

SPORTSTURF recently asked several turf managers the following question: What does your infield maintenance plan/schedule consist of?

Mike Boekholder, Indianapolis Indians

Our daily infield maintenance schedule is quite routine. We begin our maintenance by watering the infield quite heavily, almost to the point of puddling, after a game (unless weather dictates otherwise). That way, by morning, the moisture has soaked into the profile deeply and gives us a base of moisture to begin the day with.

First thing in the morning the moisture level of the skin is checked and more water applied if needed. We then roll the sliding pits around the bags as well as the position spots on the infield to firm them up a bit more. The infield is then worked up in two different directions using a 3-foot by 3-foot homemade nail board. After the infield has been spiked, it is mat dragged with a handmade mat drag and the edges are broomed to provide a smooth transition between the infield skin and the turf. We add vitrified or calcined clay every 7-10 days to the infield skin with a drop spreader to keep our 1/4 cushion of conditioner consistent. After games, the entire infield is raked with an infield/bunker rake and then rolled for the evening, after which we apply the post-game water.

Craig Potts, Texas A&M

For our softball field I water the dirt then put a nail drag on the skinned area. After the nail drag I clay the mound and plate area and then tamp those areas. Once I finish the plate and mound areas I level those two places and then pack them with my drag tractor. After this is finished I use my steel mat drag to put the finish drag on the infield. I then water the dirt several more times until right before the game or practice. I then go out and put one more finish drag on the infield to help fluff the calcined clay back to the top. Then I apply one more coat of water. I like to try to keep the infield as moist as possible. We perform daily maintenance on the lips with a broom and wash the lips approximately five times per year so we don’t get any build-up of dirt in this area.

Ryan Nieuwsma, Kane County Cougars

My infield schedule starts right after the game. I usually give it a light nail drag then drag it smooth. The first thing I do the next day is water it: a lot of water if it will be sunny all day, a little bit of water if it is cloudy. Then I monitor the water content, keep it wet until the team comes out for batting practice. I give it a watering right before batting practice starts. After both teams take batting practice I drag it smooth again and give it the final watering for the game. Depending on the weather, I could water up to five times a day or as few as twice. I always keep a layer of approximately a half-inch of infield conditioner on top. It is very important to keep that layer on there.

Mike McDonald CSFM, University of Minnesota

We broom all our edges, mow the grass every other day, and clean up any mess. We water any drier or high spots more than the rest of the skinned area. We then hand rake and fill in low areas, then we scarify the skinned area with a machine. We fix the mound and home plate clay areas, drag the skinned area, and then re-water everything as needed.
Toolcat™ Utility Work Machine
...an entirely new concept!

The Toolcat 5600 combines the best features of a loader, pickup truck and attachment carrier. Designed to excel at large property maintenance and commercial grounds keeping, the 5600 is an entirely new concept — the utility work machine!

Call toll-free 1-866-823-7898 ext. 0189
for a FREE Video Catalog and 2003 Buyer's Guide.
Or visit our website www.bobcat.com/0189

Bobcat Company • P.O. Box 6000 • West Fargo, ND 58078
INFIELDCONDITIONER

Play Ball! infield conditioner is made from a unique, naturally occurring and highly absorbent mineral known as diatomaceous earth. Kiln fired with a special process, Play Ball! particles hold up to repeated wet/dry cycles without breaking down into dust or mud. The product absorbs more water than other infield conditioners, and helps make infields playable faster in wet conditions. It comes in 25-lb. bags that are easy to handle. Available through a national network of dealers.

Eagle-Picher/800-366-7607
For information, circle 158

PHILLIES GOING NATURAL

This month SRI Sports (formerly Southwest Recreation Industries) will take the first steps to install more than 133,000 sq ft of bluegrass in the Philadelphia Phillies' new ballpark. The company will excavate the site, install an automatic watering system for sunny days and a cutting-edge dewatering system for not-so-sunny days, construct bullpens, warning tracks, and batting and pitching tunnels under the stadium. Field installation should wrap up by October. It will be the sixth major league baseball field installed by SRI Sports, which has put turf into stadiums in Cleveland, Pittsburgh, Kansas City, and New York (for both the Yankees and Mets).

SRI Sports/512-259-0080
For information, circle 168 or see www.oners.ims.ca/2077-168

MICROBIAL INOCULANT

Growth Products offers Companion, a liquid microbial inoculant containing Bacillus subtilis GB03 bacteria. Use it, and you'll have greener, healthier turf and a root system that is stronger, denser, and cleaner, says the company. University studies show that applications of beneficial microbes reduce the number of fungal pathogens, improve plant vigor, and enable better nutrient uptake by plants. Companion is all natural, so there is no risk of phytotoxicity. It requires no special handling/storage and has a shelf life of more than 2 years.

Growth Products/800-648-7626
For information, circle 167 or see www.oners.ims.ca/2077-167

VERSEATILITY
THAT SAVES
YOU MONEY

Field Accessories for Sports Turf
- 6 Models of Line Markers
- Line Marking Concentrated Paint
- 2 Models of Vacuums
- Refuse Utility Vehicle
- 2 Ball Field Finishers w/new Brush Kit
- 16 models of Sprayers
- 6 Models of Core Aerator
- Spiker / Roller 66”
- 2 Models of Utility Trailers
- 2 Models of Utility Vehicles

Call Broyhill today to see all the ways the Highlander Sport will work for you!
1.800.228.1003 ext.34 www.broyhill.com

Highlander Sport®
By Broyhill

VERSEATILITY
THAT SAVES
YOU MONEY

Field Accessories for Sports Turf
- 6 Models of Line Markers
- Line Marking Concentrated Paint
- 2 Models of Vacuums
- Refuse Utility Vehicle
- 2 Ball Field Finishers w/new Brush Kit
- 16 models of Sprayers
- 6 Models of Core Aerator
- Spiker / Roller 66”
- 2 Models of Utility Trailers
- 2 Models of Utility Vehicles

Call Broyhill today to see all the ways the Highlander Sport will work for you!
1.800.228.1003 ext.34 www.broyhill.com

Highlander Sport®
By Broyhill

VERSEATILITY
THAT SAVES
YOU MONEY

Field Accessories for Sports Turf
- 6 Models of Line Markers
- Line Marking Concentrated Paint
- 2 Models of Vacuums
- Refuse Utility Vehicle
- 2 Ball Field Finishers w/new Brush Kit
- 16 models of Sprayers
- 6 Models of Core Aerator
- Spiker / Roller 66”
- 2 Models of Utility Trailers
- 2 Models of Utility Vehicles

Call Broyhill today to see all the ways the Highlander Sport will work for you!
1.800.228.1003 ext.34 www.broyhill.com

Highlander Sport®
By Broyhill

VERSEATILITY
THAT SAVES
YOU MONEY

Field Accessories for Sports Turf
- 6 Models of Line Markers
- Line Marking Concentrated Paint
- 2 Models of Vacuums
- Refuse Utility Vehicle
- 2 Ball Field Finishers w/new Brush Kit
- 16 models of Sprayers
- 6 Models of Core Aerator
- Spiker / Roller 66”
- 2 Models of Utility Trailers
- 2 Models of Utility Vehicles

Call Broyhill today to see all the ways the Highlander Sport will work for you!
1.800.228.1003 ext.34 www.broyhill.com

Highlander Sport®
By Broyhill

VERSEATILITY
THAT SAVES
YOU MONEY

Field Accessories for Sports Turf
- 6 Models of Line Markers
- Line Marking Concentrated Paint
- 2 Models of Vacuums
- Refuse Utility Vehicle
- 2 Ball Field Finishers w/new Brush Kit
- 16 models of Sprayers
- 6 Models of Core Aerator
- Spiker / Roller 66”
- 2 Models of Utility Trailers
- 2 Models of Utility Vehicles

Call Broyhill today to see all the ways the Highlander Sport will work for you!
1.800.228.1003 ext.34 www.broyhill.com

Highlander Sport®
By Broyhill

VERSEATILITY
THAT SAVES
YOU MONEY

Field Accessories for Sports Turf
- 6 Models of Line Markers
- Line Marking Concentrated Paint
- 2 Models of Vacuums
- Refuse Utility Vehicle
- 2 Ball Field Finishers w/new Brush Kit
- 16 models of Sprayers
- 6 Models of Core Aerator
- Spiker / Roller 66”
- 2 Models of Utility Trailers
- 2 Models of Utility Vehicles

Call Broyhill today to see all the ways the Highlander Sport will work for you!
1.800.228.1003 ext.34 www.broyhill.com

Highlander Sport®
By Broyhill