Making it through a minor league season *without sod*

By Joey Stevenson

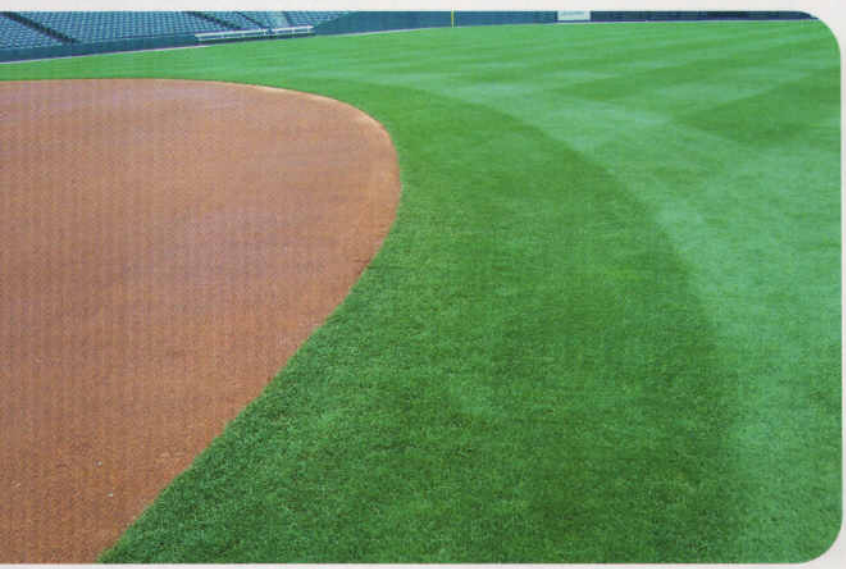
One of our goals this past season was to play an entire baseball season without using sod. Simple, right? Not so fast! With 72 Triple-A home games and 12 extra event baseball games, a few softball games, a Girl Scout concert, and five other "extra events" the idea of no sod was truly a distant dream. But, as I write this in mid-October, we were able to accomplish what I thought was not possible. This is the story of how we did it.

The ability to do this was put into motion several years ago. Located in central Indiana, the northern part of the transition zone,

Indianapolis Indians groundskeepers: Joey Stevenson (left) and assistant Evan Buckly.

the field had to be constructed properly. Composed of 100% sand rootzone and re-surfaced in 2003 with 100% Kentucky bluegrass (varieties include Blacksburg, Quantum, Midnight, Limousine, NU Destiny, and Rugby), Victory Field is regarded as a top playing surface. Recently, in central Indiana and other "northern" locations, we've seen the use of cold-tolerant Bermuda grasses. Since this option was out of the question for us, one of the best reasons we are able to tolerate wear comes straight out of the summer of 2005.

That summer in Indiana was extremely hot and dry. What typically happens to bluegrass 2 years after sod and hot/dry conditions? You guessed it—summer patch. With the stories I heard and pictures I saw, 50-60% of the field was completely devastated. Again with re-surfacing out of the question, the next best option was seed. This turned out to be one of the best opportunities to implement a perennial ryegrass mixture of seed (varieties Paragon, Grand Slam, and Pizzazz).



Top: Intern Brian McDougal in front of mound with no sod.
Bottom: Back arc at 2nd base, another seeded area.

After 4 years of overseeding with our perennial ryegrass blend and alternate years with our bluegrass blend, we have accomplished roughly a 60/40 rye/blue playing surface. Since the ryegrass has been implemented we have seen the playing surface tighten up 10-fold and overall provide an excellent playing surface. It is also pertinent to mention ryegrass has good wear and drought tolerance, hence the nickname "perennial drygrass." It also tolerates low mowing; the seed germinates rapidly, and for those interested in mowing patterns it stripes extremely well.

So was it just the perennial ryegrass that helped us? The answer is "Heck no." Also implemented in 2005 and tweaked over the past few years were using organic fertilizers for all granular applications. At Victory Field we use an all-Nature Safe fertilizer program, spring and fall applications of 12-2-6 60% ammonium sulfate (not so organic) and summer applications of 10-2-8 all organic.

When a pound is not a pound

One of the misconceptions I have heard is a pound of nitrogen is a pound of nitrogen. This is simply not the case when you're using organics vs. synthetics. Fertilizers can be composed of ammonical nitrogen, urea and inorganic salts, and other forms synthetic nitrogen. The key for organic fertilizers is the source of nutrients that are meal-based. The benefits of using a product like this are: increased microbial activity, low burn potential, improved CEC with humus, improved soil structure during heat and drought periods, and high protein meal releasing nutrients over a 7-8 week period. Also, the sulfate applications in the spring and fall allow for excellent spring-green up and building up carbohydrates and sugars moving into the summer and for fall feeding. Ammonium sulfate also has the ability to lower soil pH in the rootzone that improves micro-nutrient uptake and the spread of root disease like summer patch.

With the correct turf blend and the use of a properly balanced fertilizer program we have seen no wear issues and no outbreaks of disease since 2005. We use the philosophy of KISS—Keep It Simple, Stupid. The fertilizer program is based on application intervals of two weeks and the use of only two granular fertilizers in stock. We do not deal with headaches of a long list of fertilizer choices and in the end our turf is the healthiest we have ever seen.

So with these two crucial steps in place we still had to pay close attention to how we managed our wear areas. With our goal of no sod for an entire season, preparations had to begin at the conclusion of the 2007 season.

After we concluded our fall overseeding in early September, a second application of perennial ryegrass seed was drop spread just to the edges. At first when the seed began to germinate our edges looked extremely strange since ryegrass seedlings are about five shades lighter in color than a mature blue/rye field. This may have looked like a mistake at first but after weak seedlings were thinned out by winter and two spring core aerifications our edges were in perfect shape to take on the season.

This second application of ryegrass seemed to get our edges to nearly 80-90% ryegrass. In the past the mound had been re-sodded to

100% Kentucky bluegrass following each season and it would always need to be re-sodded the following season three or four times. So our experiment remained: How would ryegrass around the mound perform compared to bluegrass in the following season?

After about 30 games into the season and the mound showing literally no wear, we knew we were on to something. As the warm summer weather began to set in, our methods of management had to change with the onset of different environmental stresses. It was common for us to add about an 8-ounce cup of seed to the area in front of mound after each game. In the grand scheme of things seed is extremely inexpensive and we knew the players would work the seed in to get the seed/soil contact.

We all know that it is not an ideal environment for ryegrass seedlings with mid-summer daytime temperatures in the mid-90's and nighttime temperatures not dipping below 70, not to mention pulling the tarp 45 times. So how did we get around this? We purchase our seed from CISCO Companies in Indianapolis, which is coated with the fungicide Apron. This allows for the ryegrass to germinate and not be susceptible to damping-off, a common ryegrass seedling disease.

During homestands we would try several methods of pre-germinating seed. Following each homestand, we will solid tine aerify all our wear areas. These included down the foul lines, coach's boxes, around home plate, and around the mound. Subsequent to the aerification our pre-germ seed would be rotary spread to all the wear areas. This series of events would be carried out after each homestand. With typically 5-8 days in between homestands, the ryegrass would be germinated and filled in. In my opinion seedlings provide a safer playing surface than loose sod and sod staples.

At a conference with our manager after the season, he said being around the league and playing on re-sodded surfaces was awful and if you could find a method to get around re-sodding you would be a step ahead.

As we all know methods and practices that worked one year will not always work the next. It is our goal at Victory Field to try and stay ahead of the weather and environmental curves and continue to provide a safe playable surface. It is important for us to use what we have learned in classroom and our previous experience, but it is more important for us to continue to try new ideas and become more efficient overall. ■

Joey Stevenson is the head groundskeeper for the Triple A Indianapolis Indians.

Last homestand of the year.