History and evolution of a field manager and his playing surfaces; with some insight into the inner workings of the Green Bay Packers Turf Department

Having just completed four years in the Army and graduating with a B.S. degree in public administration, I was eager to find work in my field of interest. Months went by with no success. Eventually I succumbed to taking the first job I was offered in the nearest metropolitan area. Believe it or not; Green Bay, Wisconsin was considered a move to the big city, in relation to being raised on a small dairy farm in Upper Michigan. The job I took was paying medical claims for a health insurance company. I was confined to a chair in a cubicle and ready to claim my life within two months. I was desperate to find some other line of work. Every day at lunch I would run down to the job service center, approximately ten blocks away, in an effort to find alternative employment. One day I saw a small slip of paper asking for some part time manual labor. I had no idea what it was for, but the notice said to see Steve at the construction trailer in the parking lot of Lambeau Field. It peaked my interest enough, and I was miserable enough to drive straight there after work. The meeting at the trailer would alter the course of my life forever. I started working immediately for Steve Hutchison, who was contracted to rebuild Lambeau Field in the spring after the Packer's had won the Super Bowl and on their way, played some home playoff games in less than desirable field conditions.

The team had decided to rid themselves of their native soil field, which contributed to the muddy conditions of the season before. They were converting to a sand root zone and trialing a new product called Sportsgrass, which was a combination of synthetic and natural turf. If you can picture a current "artificial infill surface w/ no rubber but sand in its place and natural grass growing in that medium" that would be a fairly accurate description. The team was looking to add a field assistant and I was fortunate enough to impress the right people to get that opportunity.

During those first three years I had been moonlighting as a supervisor on the evening shift with United Parcel Service and was very close to making that my full time career choice as I was beginning to burn out from having two jobs. But one day, that decision became much easier when the team offered me a promotion and made me the field manager. I quit my UPS job and devoted myself to learning what was important to the team. With not much prior turf specific work experience, I had a very steep learning curve. I realized that some type of formal education would be beneficial and possibly garner some respect in the future, so as a condition of taking the job I asked the team to put me through school if I found a way to educate myself specifically in turf grass management. Penn State had just begun their on line program and it was a perfect fit for my circumstance.

I also was fortunate during that first year to have a good mentor in Rob Anthony, who was brought in by the team the previous year to help with the trial of Sportgrass. Nonetheless, when left completely in

charge the following year, I certainly started feeling the pressure. I was learning on the go and struggling to deliver a professional quality surface for the team with the outdated fields I had inherited.

The Sportgrass on Lambeau Field had been removed and replaced with thick cut sod from a local sod grower. To add stability, five inches of native soil was used to cap the sand root zone before sodding. The practice field that was used for training camp was also a native soil field with a fair amount of poa. It performed fairly well for a native soil field, but the team would often have to practice inside the indoor facility after a heavy thunderstorm for safety concerns, as the clay would get pretty slick. This also disappointed many fans who would travel countless miles to watch the "open to the public" practices. When the center of that field became worn, the clay would bake in the afternoon sun and became another sticking point as it wore on the player's feet and legs by not providing any cushion whatsoever. Our regular season practice field was virtually a bathtub with a native soil composition. After heavy rains, standing water would occupy the perimeter for days. It also had some major grading problems on the playing field itself.

I tackled each of these problems with every reasonable solution that I could. After receiving my only tongue lashing from a coach to date, for some poor footing on Lambeau Field during a rain game, I realized that I couldn't keep the status quote. I had been trying to operate with the growing medium that I had inherited from that replacement sod. It was very fine with a percolation rate of .1" /hour. After some guidance and advice from my NFL peers and past professors, I was able to convince the organization to allow me to sod the game field every spring with a thick cut sand based sod. It wasn't a cure all, but at least I had a few inches of sand to absorb some moisture. Wet sand is nowhere near as slippery as wet clay. However, I still had that five inch layer of native soil wedged between my sod and the sand root zone below. It was an impediment to water and air movement, and definitely wasn't conducive to root growth. One year I was able to hire someone to perform a drill and fill operation, which created vertical channels of sand throughout that layer into the sand below. It definitely helped the internal drainage, though; certainly not a cure all. I also began deep tining the profile to relieve compaction and provide some more temporary channels. Root growth would chase the air in those holes, but found it difficult to protrude downward anywhere else.

Meanwhile, on the training camp field, I was able to convince the administration to provide funds to resod the poa infestion. To achieve this, I had to educate and reeducate a handful of key people about it's undesirable traits for a football field, and why it was so difficult to eradicate. We were still living with the other problems associated with a native soil field.

My regular season practice field was the catalyst for significant change. This field was designed so poorly that it was constantly giving us problems. It held water like a sponge, low lying areas would die out from being water logged, mowing was often difficult when the field was saturated. I was often faced with the choice of letting the turf get uncontrollably tall, or keep it in check while making muddy ruts with the tires from the rotary mower. Reel mowing was impossible during those times. Each spring would reveal a devastated surface from snow mold or ice damage. Though many of you reading this, most certainly deal with problems like this, one wouldn't expect a professional football team to claim this as their own. Practice was often moved indoors due to the poor draining field.

Knowing that the team officials would much rather be practicing outdoors, especially on some beautiful fall day, than be in a stuffy building, I seized on the opportunity. I thought it was better that I was approaching them about the issues rather than them approaching me. During that time, it was difficult to get the head coaches ear. However, he had a young assistant, who was the conduit between myself and the coaching staff. One could tell that he was ambitious and wanted to be taken seriously as a person who had some influence in the organization. He was my ticket. I never thought of myself as a salesman, but in some ways I guess I turned out to be. I spent countless hours educating him on the problems that were inherent with the field's construction. I had to communicate all of my trials and tribulations in my efforts to provide them with a consistent and safe field. A constant theme of my communication was that I was doing everything that I could possibly do to give them what they needed, but that the problem was bigger than what I could fix with simple maintenance practices. The decision to reconstruct the practice field was going to take some influence above my pay grade. I couldn't do it without him. After I had his complete buy in, organizational discussion started to take place. I had to repeat the themes and arguments I had already used many times to help convince the organization that the team deserved a much better field to practice on than what they were accustomed to.

Out of those conversations came the realization that the team wasn't completely happy with the performance of our training camp field either. That hard clay was beginning to cause foot soreness on some high profile veteran players. I pushed for a plan to completely reconstruct both of them......but how.

When they finally say yes, it behooves you to have done your research and have a plan of attack. Fortunately, while I was busy trying to convince our organization that we needed to reconstruct our practice fields I was educating myself on the best way to go about it. The education I received from the Penn State program was very helpful to me in understanding root zone mechanics and helped determine the type of root zone we needed. Also critical, was the relationships and advice I received from my NFL peers. I learned something from just about everyone I had a conversation with.

Drawing upon my own knowledge, education, and advice from others I was convinced that the best playing surface solution was "grassmaster" from Desso. Because we are limited in space on our practice field we needed a soil stabilizer once wear outpaced the turf's recuperative capacity. This usually always occurs on NFL fields in between the hashes.

At that time, our head coach was just coming from a team that had an "infill surface" in their stadium and was very comfortable with the consistency of its performance. It was an uphill battle to convince him otherwise, so all I could do was state my case as professionally as I could. In the end, the administration decided to let me build the training camp field to my specifications and coach would get his wish in having a pure synthetic surface for the regular season practice field. Accepting the decision, my next task was to work with our field architect and contractor to build exactly what we wanted as perfectly as we could.

After the first training camp on our grassmaster surface, our team decided that they liked it so much that they were reluctant to move to the "infill" field.

An important point to remember in any organization is personnel turns over. If you're currently having a difficult time getting someone's ear, respect, or support, sometimes all you have to do is wait it out. Within a few years we suddenly had a new head coach and new general manager. I saw this as another opportunity to find advocates. I approached our new executives when the time was right and caught them up on what we had just accomplished in improving our facilities over the past few years and why and how those decisions were made.

Discuss when is the right time.....how and when to approach....invite them to be educated....before they get to engrossed in the details of their job* I. Give examples of head coach/ new team president, general manager.

Now we had much improved practice facilities, but the team was overusing the grassmaster field, which I saw as a compliment, but that didn't help give me the sufficient downtime to properly maintain it. We also had those layering issues on Lambeau field. I was making the best of that situation by resodding the entire field each spring and replacing wear areas as needed throughout the season; even started using overseeded Bermudagrass for late season replacements. It ended up being easier to get at that time late in the year, and was already game ready being maintained at such a low height of cut. We didn't need it to grow in late December and January; just needed something with decent cushion and good stability. It worked well as long as we didn't get an unnatural rain event, as it was grown on heavy clay rather than sand. I rolled the dice there, and got lucky.

Who would think that heavy rains could be a good thing? That is exactly what helped convince Packer executives to upgrade and reconstruct Lambeau Field. We had just received six inches of rain over a two day period in early June. Now in the days after, was a good time for comparing the practice fields with our stadium field. We had just completed some deep tining on the stadium field and had that about as porous as we could get away with and yet it was still visually soggy underfoot. The newly renovated practice fields, with their improved drainage capacity were firm and stable, only the canopy was damp.

I decided to reach out to our general manger and ask him to take an afternoon walk on each of the fields and let me know what he thought. I explained to him the reason for the difference and what kind of consequences we might have if we received a torrential rain during a regular season game. Each team invests heavily in its players and therefore safety should be a premium. It was another selling point for me, but that simple move of asking him to walk the fields was all that was needed. The difference was so great that within six months of that afternoon walk we were starting to reconstruct Lambeau field to replicate the grassmaster training camp field.

Everyone knows the phrase carpe diem "sieze the moment". Recognizing the moment can be key to success. Through the previous process, I realized that I had some strong supporters in our new head coach and general manager. Our team president was retiring within a year, and the search for a replacement seemed to leave a bit of a power vacuum on the administrative side. It was kind of like a lame duck session. There probably would never be a better time to push for another grassmaster practice field. By this time, the new coach would barely use the outdoor synthetic surface. Players were complaining about leg fatigue when switching from the grassmaster practice field. This caused overuse

of that field and was cutting into my ability to keep it properly maintained. Our head coach really helped me out when he absolutely refused to use the outdoor synthetic field at all. This finally resulted in the last field construction project that had the team acquiring adjacent property to build one of the finest training camp facilities in the country. Besides building a state of the art field, they complimented it with lighting for night practice, permanent bleachers for 1,500 fans, and also improved the area by adorning the field with a masonry wall on the back side of the bleachers complete with an adjacent paved pedestrian thoroughfare.

When they finally give you what they want, it creates added pressure to make sure the system works well and meets or exceeds everyone's expectations. I take the approach that it is up to me and my crew, to make the system work for us. I changed the way I think about our fields and now view them as a system or playing surface rather than just thinking about the grass. You have to think about your particular sport and figure out what the most important function of the surface happens to be. Is it footing? Do players need to be able to accelerate, stop on a dime, and change direction? Do players ever slide on the turf? Does the surface act as a cushion for players to land on and affect safety? Does the ball interact with the surface by rolling or bouncing and what kind of surface will provide the best results for that?

After construction was completed, we had to learn how to manage the grassmaster surface. I wouldn't even say that we have it down to a science yet, but everything we started doing was based on our predecessor's successes and failures. With the grassmaster system, one has to pay particular attention to the surface. Too dense of a canopy can negatively affect footing and any developing layer can also negatively affect footing. Sometimes you have to learn this the hard way, even if you've heard it from others.

We were advised to collect clippings, scratch the surface regularly, and renovate the surface frequently if not yearly to regenerate the natural canopy. I must admit that in the first two years, we didn't do those things often enough, but quickly readjusted when footing seemed to be affected. Now we renovate the surface yearly and start anew with seedlings, scratch and verticut more regularly, collect all clippings, soil relieve with solid deep tines to soften the surface just before each game, and lowered our height of cut dramatically to help that cleat bite into the synthetic fiber/root zone interface. A grassmaster system works best when the canopy is full but not too full. Finding the balance is the art of the maintenance. When you can split the canopy with your fingers and you can see synthetic fiber and sand rather than an accumulating biomass layer you should be in a good position. That isn't saying that a certain amount of surface moisture can't still affect footing, especially if players opt for footwear with more surface area contact. To that end, we attempt to keep the surface as dry as possible by spraying for dew, using high speed blowers to dry the surface when necessary, and by not letting the tarp settle on the surface when utilized.

We have allowed ourselves to change tactics over the past few years, in response to trial and error, suggestions from peers, and sometimes trying things that seem to make sense to us. Lowering our

height of cut stemmed from our theory that there would be less dew formation to deal with if there were less surface area of plant material to produce it in the first place. Consequently, I think the shorter canopy helps a shorter cleat penetrate into the soil surface better. Soil relieving a day or two before game day arose from a discussion with another NFL peer. In addition to maximizing the cushion it should also improve footing by giving a place for the energy to be directed when the shoe impacts the surface. With the grassmaster fibers, we don't have to worry about the loss in stability you'd normally get when aerating with a conventional field.

To summarize, what has helped us be successful so far (I emphasize so far) at Lambeau Field is a willingness to learn from others, being able to adapt our management style to fit the needs of our climate and playing surface system, not being afraid to try something new, timely and appropriate communication within our corporate culture, and proactively engaging the team's end users and decision makers.