

Managing a **natural** multi-sport & event field

By Ross Kurcab, CSFM



Editor's Note: Departing from our normal coverage of Field of the Year winners, we asked Ross to write this article. He and his crew won both the 2005 Professional Football Field award and 2005 Professional Soccer Field award for their work at INVESCO Field at Mile High in Denver.

Many of my friends who work for parks, schools, and universities, and many I know in professional sports venues, have already forgotten more than I know about multi-sports/events field management, but this magazine asked me to write about my experiences at our stadium, and give an overview of our approach.

A good multi-sport field starts in the design phase. The Broncos had the good sense to get me involved with our field designer at the earliest stage. We placed a great level of importance on the design and construction phases. We knew from the start that we would be doing a professional football/soccer multi-sport field, which would also play host to all sorts of other public, corporate, and private events. We did our homework and went with a grass stabilization system for our entire surface.

Since I manage the turf, my participation in design and construction ensured quality. Not because I'm any good, but because I'm lazy. Why not save a ton of work (and money) by sweating the details during the design and construction phase? Credit is due our head coach Mike Shanahan, executive VP of Business Operations Joe Ellis, and our owner, Mr. Pat Bowlen, for seeing the value of my participation very early in the development process.

Field marking and layout

Field marking and layout issues present certain conundrums on a multi-sport field. We always check with the governing bodies of the sports involved. Most of them have provisions for field marking and layout concerning multi-sport fields (as well as other issues). Conflicting mandates are all sorts of fun! We always work layout of a field from a document emailed or faxed by the sport's governing body. We layout and mark the field with great attention to the detail of their document.

You'd be amazed at some of the mistakes and vague specifications in these documents. Some leagues require that old marking lines from previous games be removed (they never tell you how though). Any paint is "temp-stripe" if you scrub hard enough. When necessary, we

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“green-out” painted lines and/or logos with green paint. It’s not a perfect science, but I believe it is the best for our surface. Straight green dye type products are too dark of a green for most fields. Also, they tend to be too viscous and roll off the painted leaf blades. We start with yellow paint, and add just enough green dye to get the tint we want. When we get it just right, the painted-over line will look too dark when looking into the sun, and too light when looking away from the sun. We try to green things out right after the game, allowing maximum time for the whole thing to fade out. If we can get enough time for a couple of mowings, even better. The downside of this process is that everything gets twice the amount of paint. Doing it once is no big deal, but for in-season tenant sports it can really multiply the paint damage.

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Working together

Of utmost importance to me is cooperation between the user groups and the venue. Well before the season or event, we try to get all parties on the same page. When assessing the potential event, I always think to myself: “How many people, of what age group, wearing what kind of shoes, will be doing exactly what, at what time of what day?”

The “exactly what” part is the hardest. With details in hand, I make an assessment as to the damage on the field. I think “type, frequency, duration, placement, and time of year.” “Type” refers to the type of damage or stress. Is it created traffic with adults? Is it essentially a heat build-up challenge? Maybe it’s trampling/twisting damage (in my opinion, the worst of them all). Usually, it’s a combination of damage and stresses. “Frequency” – is this a one-time event/game or is it part of a series/season? “Duration” can be as little as a few minutes, or as much as 8 days for a major concert build-out and teardown. A 5-hour marching band competition is rough, but doable. A 16-hour band competition is brutal.

“Placement” is about where on the field the event will take place and/or where the worst areas will be for a sporting event. My biggest concern, the thing that can keep me up at nights, is the “middle third” of our field. This is the area between the football hashes and about 15 feet outside. Our tolerance for damage here is low because this area will be center stage for the fall football and NFL grind. We do more than 50 private skills competition and team-building events on the field every year. We use the sides and ends of the playing surface for these events (outside the field of play). Our tolerance for damage is much greater here.

“Time of year” is also self evident, but critically important. A 10-hour day of youth football 1 week before the NFL pre-season begins in August is tough, but that same event held in May or June is much more doable. The whole process becomes like an IPM approach to event-damage assessment, with economic thresholds and tolerances.

Once all these questions have been answered, I’m ready to start working with the user group or events planner on the rules. Rules are useless unless all parties agree on how they will be enforced. I try to work with the user groups or teams, I don’t (and can’t) just lay down the law. I treat them as paying customers, which they are. I carry handy drawings of the field map in my notebook to use as scratch pads during this process.

By now our events staff pretty much knows what can and cannot

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be done and this whole process goes quickly. But throughout the process, I try not be the defensive turf manager that is against any use or abuse of the turf. We are in business. We kill grass to make money for the company. Growing strong, healthy grass is like winning for a sports team; it takes care of a lot of problems. This is where my team and I come in. From a purely turf management perspective, our jobs might well be described as: establish the grass, prepare the grass for damage, observe to ensure the grass is damaged by the rules established, and repair the grass surface afterwards, repeat.

Growing strong healthy grass might seem quite obvious, but I feel its complexity goes well beyond what we know. It's the one thing we

sports turf managers have relative control over (given adequate resources). But if it were easy, everybody would have a nice lawn. Sports turf management is a perilous dance of science and art. Success comes to those who study and learn the science, and apprentice the art. There are no short cuts, there is no recipe to natural grass sports turf management. The field comes with no instruction manual, and every day and every season is different.

Instead of our "recipe," I offer the following observations and approaches:

- We often say that we don't really make plans, we just generate scenarios. Maintenance and field prep operations have to be flexible and nimble to the winds of Mother Nature and the dynamic requirements of the events schedule.

- We constantly grind the efficiencies, but never lower the quality of our work. We employ the Critical Path Method of project management (Google it). This really pays off during quick multi-sport conversions.

- We reward creativity and heroic effort.

- We hire smart, passionate, professional turf-team members. "Hire smart, train hard, manage easy" as Dr. Dick Caton used to say at STMA conferences.

- We do job rotation and train everyone on everything. We try not to fall into the comfortable patterns and begin to specialize in tasks and operations.

- See what you are not looking for. Like many, we really get to know our field and often see subtle hints that something is off. Why did the seed pop here better than over here? How can we use this information? Or maybe the grass just seems happier in one part of the field. Why? We never just say "Hmmm, interesting" and walk away. We try to figure it out or at least come up with a theory. Maybe test our theory a bit. Valuable insights are gained about our turf management program with this approach. If you develop good turf-eyes, and ask "why" a lot, the grass never fails to tell you what's going on.

- I talk to my turf. Why not? Often, I apologize to it.

- We know how to calibrate application equipment and applications. We use factor-label to get our math and rates correct. (Google it).

- We don't do whack mowing patterns; we use patterns that enhance the field of play, not dominate it (just an opinion!).

- We use bright paint, stencil virtually everything, and have the field layouts shot in by a professional surveyor.

- The STMA has been a great facilitator for our continued education, and we are long time active members and supporters of both the STMA as well as the Colorado Chapter.

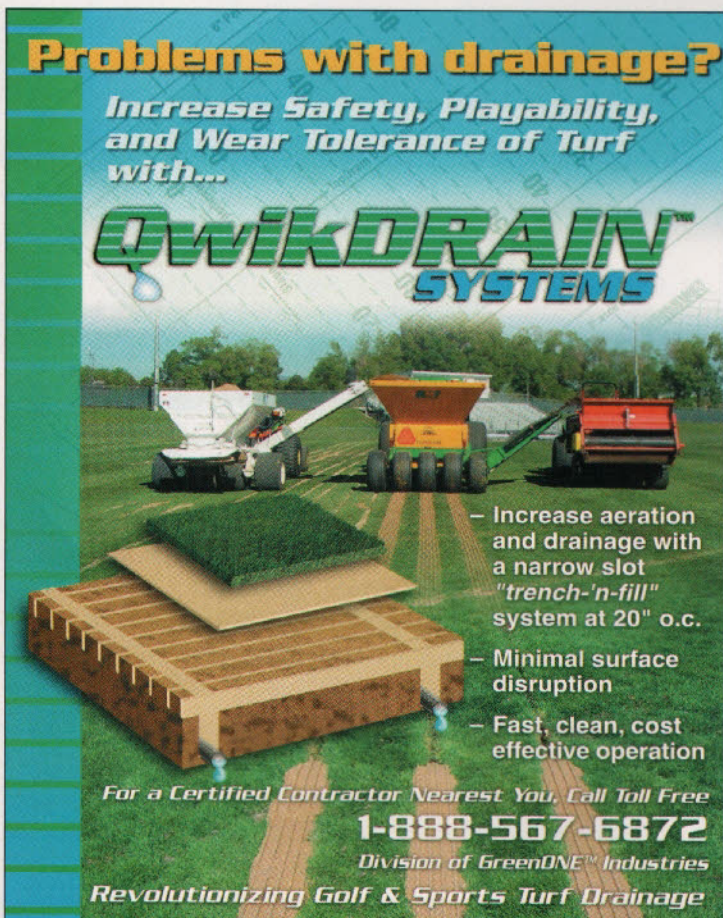
- We keep a clean, efficient shop and office.

- We run a tight budget, and can account for it.

- On our turf team, if you get bitter, and take things personally, you have to wear the "happy hat." You simply must play nice with the other children! We don't take ourselves seriously, just our jobs.

- "There are no grass problems, only people problems" the late, great Dr. Jackie Butler used to say.

- I heard that Tommy Lasorda once said, "Happy cows make better milk." We have a lot of fun at work. After all, we are ultimately in the



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“fun” business. Shouldn't we know our product?

- There is a huge difference between almost right and exactly right. I learned this from Coach Shanahan. This is where we get serious about our jobs. Details, not even consciously perceived, earn a field a good reputation; bright, tight paint, straight painted lines, straight mower lines, quality cut, consistency, good traction and grip, resiliency, deep green color, density, smooth ball roll and hop, and a smooth finish are just a few.

- Lower mowing heights, especially cool-season fields, will win over players and coaches. We go with 1 inch and I have noticed several benefits. I think the increased density actually helps protect the crowns from traffic. I think the more shallow roots form a tight mass in the top inch of the soil, where the games are played. I can manage irrigation accordingly. Deep roots on high maintenance athletic fields are an over-rated concept, in my view. I want a tight mass up near the surface. The high density-short canopy with a strong root mass in the top inch is what the players mean when they call a field “tight.” Conventional turf wisdom may not bear me out here, but next time you play golf on a bluegrass fairway cut at 1/2 inch, you'll see and feel what I'm talking about. Besides, grass varieties these days are often bred for tolerating lower cuts.

- We believe in the new “Minner-ology.” Seed is relatively cheap, and players, coaches and fans dig good grass cover. Grass evolved being trampled and grazed, the seed will come up. (Note to Dr. David Minner: I've copyrighted that term and I'm willing to sell it to you).

- Do what you love, and you'll never “work” a day in your life.

Finally, I would like to express sincere gratitude to the STMA for these two prestigious awards. Only because we hosted two NFL play-off games in January were we not in attendance at the conference and awards banquet to receive them as a team. The awards were very well received throughout the whole organization. The plaques sit in the main trophy case at the stadium management offices. Our creative services department put together a 1 minute time-lapse video of us painting the game field, overlaid it with music and the turf team's names and awards we won, and then played it on the big video board during the Jets game in November. We even drew a cheer from the crowd! Needless to say, it was quite exciting. I'm just glad the field looked fairly decent that day.

A heartfelt thank-you must go out to the Broncos VP of Stadium Operations, Mac Freeman. His cutting edge approach to stadium, entertainment, and events management is leaving an indelible mark on the industry and was the key to winning these two awards. My boss



Wayne Bottom, our chief engineer, and his talented staff of professional tradesmen, along with Jamie Breitweiser and Nick Sadri from our operations department have helped us out countless times with goal posts, tarps and anything else we ask for. These people have my deep respect and gratitude; they also have a big part in these awards. Andy Gorchov directs our public events, and Patty Moser directs our private and corporate events. These two, along with the entire events staff, play a huge role in being so careful and detail oriented in their event planning and management. Howard Brown and his conversion team do the field sets and strikes with great care for the turf, even when it makes their job a lot tougher. Scott Blied and his heroic security staff have saved the day numerous times by acting as my eyes when I'm not at the stadium and alerting me to problems.

I can't give enough recognition to my former assistant Abby McNeal, CSFM, who is now the head turf manager at the new Toyota Park in Chicago, and my current assistant Andrew Hoiberg. These two talented professionals, along with Abe Picaso and the all the other part-time turf team members we've employed did (and do) all the work while I get all the credit. I'll bet I'm the only turf manager in the NFL that has a Picaso painting his field. Cody Freeman has some big shoes to fill as our newest turf team member. I could put this turf team up against any challenge in the sports turf world, and I could take the day off, they're that good. Not only that, they'd have a great time doing it! I have to say thank-you to our turf manager Troy Smith, CSFM and his gifted staff at our Dove Valley training complex. Troy, Nick McNamee, and Brett Baird keep the practice fields so nice, that the team rarely wants to come down to the stadium to practice. Brett was

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recently named head turf manager for the Colorado Rapids new soccer stadium and complex in Denver set to open in 2007.

Apologies for all the names, but as you can see it's a team approach here at INVESCO Field at Mile High, and the Denver Broncos. After 22 years I have learned two simple steps that are essential to successful sports turf management:

1. Work for a great owner like Mr. Bowlen, who truly burns to be the best and win.
2. See step #1.

Ross Kurcab, CSFM, is turf manager for the Denver Broncos and INVESCO Field at Mile High.

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Congratulations to Invesco Field for being named STMA Professional Field of the Year

Congratulations to our friend Ross Kurcab and his team at Invesco Field in Denver. World Class is proud to have our field marking paints and stencils used by the world class crew at Invesco Field and by many of the best sports turf managers in the world.

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