THE FIELD AT COBB STADIUM, University of Miami, Coral Gables, FL, was named the Sports Turf Managers Association’s 2010 College Soccer Field of the Year. Chris Denson led a crew that includes Geovani DeArmas, German Larios, and Jose Gutierrez. From Denson’s award entry:

“There are several maintenance challenges we deal with throughout the year. Due to the close proximity to the ocean, there is a small amount of salt water intrusion in our irrigation well. If the well is drilled any deeper, the field would be irrigated with brackish water. Due to the shallow fresh water table, the suction line can’t be raised to fresher water. This situation is countered with lime and chelated calcium applications and infrequent irrigation during the rainy season due to large amounts of rainfall.

“Another challenge we have is the variety of turf we have. Soccer has GN-1 variety the same as the practice football field. Although the GN-1 variety fits the application due to the amount of activity the field receives, there is no sod farm producing this variety in the state of Florida or the joining
**Monthly maintenance and fertility program**

Weeds are spot treated 1 time per month with 3 gallon pump sprayer. 95% of weed infestation is goosegrass and Southern signalgrass.

Insects are spot treated as necessary if past threshold. Only insects past threshold are mole crickets and fire ants. Top Choice is applied. Beneficial bacteria are applied 1 time per week throughout the year.

Soccer field to track is edged two times per month throughout the year. No fungicides have been applied to field in 7 years of employment.

### JANUARY: outdoor/indoor track on field
- 0-0-22 applied @ ½ lb/K/1000 ft²
- 14-5-14 with minors applied @ ½ lb N/1000ft²
- 8% Chelated Calcium applied @ 4oz./1000ft²

### FEBRUARY: outdoor/indoor track/ soccer individuals on field
- 0-9-22 applied @ ½ lb/K/1000 ft²
- 14-5-14 with minors applied @ 1/2lb/K/1000 ft²
- 500 lbs Lime applied

### MARCH: outdoor track/ soccer spring practice
- 14-5-14 with minors applied ½ lb N/1000ft²
- 500 lbs Lime applied
- 8% Chelated Calcium applied @ 4oz./1000ft²
- 12-0-12 AS with chelated Fe applied @ ½ lb N/1000ft²

### APRIL: outdoor track/ soccer spring practice
- 14-5-14 with minors applied ½ lb N/1000ft²
- 500 lbs Lime applied
- 12-0-12 AS with chelated Fe applied @ 1lb N/1000ft²
- Aerify goalmouths and center of field with 3/8” solid tines

### MAY: outdoor track/ soccer camp
- 14-5-14 with minors applied ½ lb N/1000ft²
- 500 lbs Lime applied
- 8% Chelated Calcium applied @ 4oz./1000ft²
- 12-0-12 AS with chelated Fe applied @ 1lb N/1000ft²
- 12-0-0 with minors liquid applies @ 4 oz/1000ft²

### JUNE: outdoor track/ finals/ soccer camp
- 14-5-14 with minors applied ½ lb N/1000ft²
- 500 lbs Lime applied
- 12-0-12 AS with chelated Fe applied @ 1lb N/1000ft²
- 12-0-0 with minors liquid applies @ 4 oz/1000ft²

### JULY: soccer camp
- 14-5-14 with minors applied ½ lb N/1000ft²
- 500 lbs Lime applied
- 8% Chelated Calcium applied @ 4oz./1000ft²
- 12-0-12 AS with chelated Fe applied @ 1lb N/1000ft²
- 12-0-0 with minors liquid applies @ 4 oz/1000ft²
- Vertical 4 directions and remove debris
- Aerify ½” core tine and remove cores
- Topdress ½” 220 sand and roll

### AUGUST: fall soccer/ fall football
- 14-5-14 with minors and Ronstar applied @ 300lbs./acre
- 500 lbs. Lime applied
- 12-0-12 AS with chelated Fe applied @ 1lb N/1000ft²
- 12-0-0 with minors liquid applies @ 4 oz/1000ft²
- Aerify goalmouths and center of field with 3/8” solid tines
- Liquid silicone applications on goalmouths and center of field
- 21-0-0 applied to goalmouths and center on field @ ¼ N/1000ft²

### SEPTEMBER: fall soccer/ fall track/ fall football
- 14-5-14 with minors applied ½ lb N/1000ft²
- 500 lbs. Lime applied
- 8% Chelated Calcium applied @ 4oz./1000ft²
- 12-0-12 AS with chelated Fe applied @ 1lb N/1000ft²
- 12-0-0 with minors liquid applies @ 4 oz/1000ft²
- Aerify goalmouths and center of field with 3/8” solid tines
- Liquid silicone applications on goalmouths and center of field
- Topdress 1/8” 220 sand
- 21-0-0 applied to goalmouths and center on field @ ¼ N/1000ft²

### OCTOBER: fall soccer/ fall track
- 14-5-14 with minors applied ½ lb N/1000ft²
- 500 lbs. Lime applied
- 12-0-12 AS with chelated Fe applied @ 1lb N/1000ft²
- 12-0-0 with minors liquid applies @ 4 oz/1000ft²
- Aerify goalmouths and center of field with 3/8” solid tines
- Liquid silicone applications on goalmouths and center of field
- 21-0-0 applied to goalmouths and center on field @ ¼ N/1000ft²

### NOVEMBER: indoor track
- 14-5-14 with minors applied ½ lb N/1000ft²
- 500 lbs. Lime applied
- 8% Chelated Calcium applied @ 4oz./1000ft²
- 12-0-12 AS with chelated Fe applied @ 1/2 lb N/1000ft²
- 12-0-0 with minors liquid applies @ 4 oz/1000ft²
- Aerify field with Aeravator ½” solid tines

### DECEMBER: indoor track/ football bowl practice
- 14-5-14 with minors applied ½ lb N/1000ft²
- 0-0-22 applied ½ lb/K/1000ft²

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States. Sodding is needed very rarely and only in small square footage amounts (goalmouths, etc.) if done. The amount of turf needed doesn't justify shipping charges from farms producing the GN-1 variety. Due to space limitations at the facility, there is no room for a sod farm to be installed. A small area on the football field that the team doesn't use is set aside for any sod work needed with the GN-1. No aggressive maintenance is done to this area to help with some organic buildup and ease of harvesting with a small sod cutter.

"Another issue that can be a struggle throughout the year is South Florida's weather patterns. Times during the winter months dry season, it can go for weeks with no rainfall and dry low humid conditions. During the rainy season, it can go for months with daily afternoon rain showers. This can be a struggle due to excessive moisture, wet playing surfaces during activity, and inhibiting the crew from working the field due to lightning threats. Another weather factor during the rainy season is the threat of hurricanes. These storms can cause tremendous amounts of destruction and command a lot of time and efforts to secure everything and keep events on schedule post storm. Large amounts of salt water can be absorbed by these storms and brought inland with the rainfall. One last struggle is the amount of availability for the crew to work on the field. With two sports sharing the field, football and baseball using the field as an overflow, and conditioning and training of sports without turf-grass to train on, time for our maintenance can be very restrained.

"The field is in use almost every day with athletes competing or training the majority of the day. Extensive communication
with the coaches and trainers is needed to allow everyone to get their jobs done without major conflicts.”

SPORTSTURF: What changes did you make to your maintenance plan for 2011, if any?

DENSON: We didn’t make many changes in our program this year. Our nutrition program seems to fit pretty well so we have left that alone. With the GN-1 turf and some iron deficiencies, we have added a few extra applications of just iron to help out our color. We have also added some extra silicone applications to help us out for additional events and wear areas. This year we have had real dry weather in the dry season and real wet when the rainy season came so our insect and weed pressure has been a little higher than normal. We just added a few extra spot treatments to help control this. We have also done a few extra spot applications of sand and aerification in a few areas to help recovery from additional events on the field.

ST: What’s the best piece of turf management advice you have ever received?

DENSON: I really can’t isolate one particular piece of turf advice that has been given to me over the years. I have been really fortunate to work for or with some of the best groundkeepers in the country. I don’t think they really realize what kind of impact just talking about their challenges has had on my career and how I am able to handle certain situations. I think I have learned more from small comments and stories just standing back listening to how the situations have played out or how they would have dealt with particular issues.

There are so many aspects in grounds management; I think you have to take advice from all aspects and put it together. There are some that have showed me machinery, to budget work, to even getting a field ready when it is under water a hour before the game, to dealing with people from coaches to contractors, and just some that have been a phone call away just to vent or tell a story how they dealt with the same situation a few years back.

I think putting all these little daily pieces of advice together are part of the reason I have been able to learn so much about the grounds industry. I know there are sometimes that you have to speak up, but there are also a lot of times when just listening is priceless. The knowledge of a grounds manager that has worked his way to the top or has been in the industry for several decades goes a long way in experience and knowledge with dealing with certain situations that can come up. Just being able to rely on a valuable resource like the STMA has helped tremendously through the years. I know I will always have room to grow and learn as a grounds keeper and a manager and I will always try to stay open to taking advice from all aspects of the grounds industry.

ST: How do you balance your work and personal time?

DENSON: I don’t think it is as much me balancing it as the people around me. First, I have a great wife that understands the demands of the University and a part time position at Sun Life Stadium (he works there as an event staff supervisor). It has made some unique situations finishing a project at the University and going straight to the stadium to help the crew all night turn a football field into a baseball field. I know that without her support, it would make everything all together very difficult. She understands that I love the work I do and for her support and understanding, I have to say thank you.

Having a crew to depend on is essential to being able to have some personal time and trusting things will still get done. We try to communicate about events going on with each other so we can rotate and get the personal time everyone needs. We have obligations at work but all of us also have personal obligations we deserve to be able meet. A good staff in the offices and great coaches are real important for that balance too. The staff at the University is very supportive and understanding about how important family is. They support and help us anyway they can and that is essential in finding that balance.

ST: What’s your most valued piece of equipment and why?

DENSON: I would have to say my crew is more important than any piece of equipment we have. I can’t say enough about the work the guys do here, especially my foreman Geovani DeArmas. The guys take pride in what they do and I think that is the difference maker. These guys are the ones working in the heat of the day, through afternoon rain storms, and putting in extra time away from their families to get the fields ready for events, practices, and games. When our equipment goes down, the crew is still making things happen here. I can’t say enough about how hard these guys work and the pride they put into their work. You can always find a replacement piece of equipment, but you can’t always find a group of guys that care about the quality of work as they do.

ST: Are you yet involved in “sustainable” management practices? If so, what are you doing?

DENSON: We are trying every year to be involved in more ‘sustainable’ practices. We are trying to improve our recycling practices each year. We are now recycling all rubber, batteries, and used oil and filters from our equipment. We also recycle our cardboard and plastic/metal products. We have also implemented an electric utility cart in the fleet. We are looking to add more electric and fuel friendly equipment as we have to update our fleet. We are also trying to reduce the amount of pesticides we apply not just for the environmental factors, but the cost reduction too.

All our fields are spot treated for insects and weeds as they reach a threshold. Compared to a broadcast, this has reduced the amount spent on these products by thousands of dollars a year and has been a drastic reduction in the amount of chemical put into the environment. We have tried to control any pathogen attack through cultural practices and nutrition management. It has been 7 years since we have had to apply a fungicide on any of our fields.

Other than one aggressive round of cultural practices per year, all other cultural practices have been reduced to spot treatments; trying to only alleviate specific compacted areas, nutrient deficient or wear areas, isolated pest problems, etc. This has reduced labor hours, abuse on equipment and down time on the fields. We also apply a mixture of beneficial bacteria daily. This has helped use nutrient applications and soil management reducing the amount of irrigation and fertilizers needed to maintain a healthy turf. We try to be as environmentally conscious with all aspects of our operation and we are always for better ways to have a sustainable turf program.