F.O.Y.
Field of the Year

Hort teacher leads
Field of the Year effort at Atlee HS

SPORTS TURF MANAGER MARC C. MORAN, a horticulture/turfgrass science instructor currently working on his Master's degree, led a group effort at Atlee High School, Mechanicsville, VA to win the 2009 STMA High School/Parks Softball Field of the Year Award.

Moran began working with the school's practice field in 2000 as part of a landscape class project in lawn and turf care. "I was then asked to take over managing the sports turf facilities in fall 2001. In 2002, I worked with other horticulture teachers in the county to develop a county-based Turf Science curriculum, which later was adopted by the Virginia Department of Education. Atlee High School became the first high school in Virginia to teach Turf Science as a recognized course. Given the available access to sports fields, we adopted them as our 'land laboratory.' It has been a great partnership since the program began," Moran said.

The original construction date of the facility was in September of 1991. The field was sprigged, in late summer and was not opened for regular use until spring of 1992. At that time, the field was still a mix of cool season and warm season grasses. "We employ a perennial rye/dormant bermuda overseeding program. In mid-October, we overseed with Brigadier blended perennial ryegrass seed. We over-seed at a rate of 6

lbs/1000 sq. ft. during the initial overseeding. We follow up with a late-season overseeding of 2 lbs/1000 sq. ft. All seeding applications are done with walk-behind broadcast spreaders. We transition our ryegrass out in late spring with an application of Revolver Herbicide. If needed, we follow up with a second application," Moran said.

In the spring of 2008, the infield mix was improved by dressing 16 tons of Luck Stone's Infield Mix to the existing infield skin.

"We employ a surface drainage system. Our field has a slight slope from infield to outfield that drains water from the playing surface. Water that is not absorbed is collected by a large storm drain located beyond the outfield fence.

"We face many challenges when it comes to the management of our softball field. Many of our challenges are not unlike most public schools across the country, but we have managed to take a unique approach to overcoming those challenges. Through administrative support (school and school board), athletic administration efforts, industry partnerships and hard work, we have been able to take on each challenge with visible success and positive outcomes," Moran said.

Since 2005, the Atlee Turf Science Program has taken over management of the softball facility. Our program is a two-year education program developed to educate students in the broad areas of turf science. We use the various sports fields on campus to teach important areas of the industry. The students are involved in every aspect of field management. They help develop the management plan, organize work schedules; they handle all aspects of infield care, line painting, and mowing.

"Our first challenge has always been budget. As with most public schools, our funding resources are primarily directed toward education and student development. Each year, our athletic administration must look at finances and decide what monies are available for field maintenance as well as other financial areas like team operations, game staffing, and officials. It has been our effort to cut cost when we can and prioritize spending on critical areas of field management. By working within the Turf Science Program, our athletic administration has been able to keep nearly every management area in-house. The program handles all spraying applications, fertility applications, aerating, topdressing, as well as day to day field maintenance.

The second major challenge is manpower and time. Each goes hand in hand with the other. Coaches seem to have less and less time, thus field maintenance becomes more and more difficult. Our students make up the balance of time by completing nearly all management activities during their class period. Nearly all management practices are completed during one of three classes offered during the school day. Nearly all management during the school year is completed by students. Any extra work that may need to be done is made up in balance by coaches and volunteers," said Moran.

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Field maintenance calendar

JANUARY
- Check Infield for Weeds

FEBRUARY
- Check Infield for Weeds
- Nail Drag Infield once a week for Maintenance
- Begin Athletic Season Transition

MARCH
- Check Infield for Weeds
- Mark field weekly for Softball Games
- Nail Drag Infield once a week for Maintenance
- Mow at 1" as needed

APRIL
- Fertilize 15-30-15 Starter fertilizer at 1lb. N per 1000 ft2
- Mark field weekly for Softball Games
- Nail Drag Infield once a week for Maintenance
- Core Aerate two directions, drag cores and remove debris
- Mow at 1", increasing frequency as green-up continues

MAY
- Broadleaf weed control spraying with liquid nitrogen application of 1/4 lb. N per 1000 ft2
- Apply post-emergence crabgrass control as needed
- Mark field weekly for Softball Games
- Nail Drag Infield once a week for Maintenance
- Mow at 1", increasing frequency as green-up continues

JUNE
- Apply Revolver Herbicide for perennial ryegrass transition
- Hollow Tine Aerate entire playing surface, ¾" x 6" cores Vertical cut and Drag in cores
- Apply 1 ton calcitic limestone
- Apply Ammonium Sulfate at 1 lb. N per 1000 ft2
- Mow at 1 ¼", 2 to 3 times per week as needed

JULY
- Apply Ammonium Sulfate at 1 lb. N per 1000 ft2
- Mow at 1", 2 to 3 times per week as needed
- Nail Drag Infield once a week for Maintenance

AUGUST
- Apply Ammonium Sulfate at 1 lb. N per 1000 ft2
- Mow at 1 ¼", 2 to 3 times per week as needed
- Nail Drag Infield once a week for Maintenance

SEPTEMBER
- Apply Ammonium Sulfate at 1 lb. N per 1000 ft2
- Mow at 1 ¼", 2 to 3 times per week as needed
- Nail Drag Infield once a week for Maintenance

OCTOBER
- Apply Brigadier Ryegrass Blend at 6 lbs per 1000 ft2
- Apply 14-20-14 30% SRN Fall Fertilizer at 1 lb. N per 1000 ft2
- Mow at 1 ¼", as needed

NOVEMBER
- Check Infield for Weeds
- Nail Drag Infield once a week for Maintenance
- Mow at 1 ¼", as needed

DECEMBER
- Check Infield for Weeds
- Work with students to evaluate previous management plan and make improvements for the coming spring.

helped to upgrade the softball field by top-dressing the infield with new infield mix. Students also work hard each fall clean up any renegade weeds that may pop up over the summer. It's a dirty job, but the kids do a great job of getting the field ready for the fall and making sure it is in peak condition as we begin the school year. Students also work to maintain the irrigation system and repair any areas of the system that may need attention.

Our students have great pride in doing the job right. If I could pay them, I would. They deserve all the accolades that people express about our fields. My students do the work for the right reasons, school pride and sense of ownership in doing something right."

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

MORAN: Working with local vendors, we are hoping to get started with a Patriot Bermudagrass inter-sprigging project. We do not have the time or budget, to do a total renovation, but we have done some research into inter-sprigging into our existing stand and think that we can slowly transition it over the next two seasons.

As always, we are looking to do more with less. As our workloads tend to increase and budgets are being streamlines, we are trying to develop ways to get the same result with fewer inputs. An example would be to spend a little more for a low release fertilizer product, but make fewer applications over the course of the growing season. Compare that to some of the soluble sources we apply at more frequent intervals. If we really looked at the results in regards to growth combined with time and cost, I believe we would see that our current strategy maybe be a little less efficient.

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

MORAN: Two things really stick out. First, when I had just gotten into field management I used a lot of the same techniques and "programs" that others before me had used. What I learned was that I was getting the same mediocre results. Our Virginia Sports Turf President, at the time, told me to take soil samples and he helped me look over them and see what was going on with my soil. Since then, I take samples of each field twice a year. It's amazing how much money we save on inputs and the incredible impact it has had on our turf quality.

The second is communication. I try to talk with my athletic director every day and try to talk with each of the coaches a few times a week during the season. I tell my students that our voice is one of the most powerful tools we have when it comes to our success. If you keep the constituents in the loop, we have found that overall; our fields remain in good condition throughout the season. This goes beyond our game facilities. We work with the band director, athletic director, and head coaches at each level, school administration and even try to explain to athletes so they understand our goals. Simply said, we try to educate the consumer to they get the most out of the product.

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

MORAN: This is an area that I think has changed quite a bit since our program began working on the fields. As the program has grown, that provides opportunities for more students to take an active role in each of our fields. We find that 95% of the work that needs to be done on the fields during the school year is handled during the school day by various turf classes within our program. It is very rare that I am working beyond the school day to get a field ready. The summers are a little different, but we have worked to develop an organized schedule that includes coaches, volunteers, and me taking care of the facilities. We have a retired coach, Jim Anderson, who takes a lot of pride and time dedicates it to our athletic fields during the summer. His time and effort is invaluable when it comes to our summer maintenance.

ST: How much input do you have regarding administration decisions?

MORAN: Our director of student activities has the ultimate say in what is done with our facilities, as he rightly should. The decisions and practices my students and I employ are a direct representation of our athletic program and his administration. Our goal is to provide him the best possible management plan that will have the greatest positive impact on our facilities. I work directly with him to develop a budget for what we project we will need for the coming year, and I also work with him to forecast and project repairs or improvements we think we should address. These are typically suggestions we gather from coaches, athletes and observations we make throughout the season.

ST: How do you establish good working relationships with both supervisors and end users?

MORAN: As I noted, I try and listen to their needs and see what I think we can realistically accomplish with the resources we have available. I also work very hard to keep them in the information loop when it comes to conditions, playability, safety, and any projected maintenance that may impact practice or play. Conversely, most of the coaches have an open line of communication with me and keep me informed if things develop on their fields or if repairs need to be made.

ST: What was the biggest compliment you've heard about your field?

MORAN: One of the biggest compliments has to be the fact that most people are amazed that the fields are managed by students and that we do all that we do with staff of teenage men and women who get a kick out of something looking and playing like a professional staff had been working on it all day. By the end of the year, most people are amazed at how knowledgeable and proud the students are about the fields they work on. I'm often told by other coaches and athletic directors that they wish they had a program like ours at their school. Those types of comments make you feel like you have done something right and that all the hours of hard work have paid off.

ST: What's the biggest complaint, if any?

MORAN: To be honest we do not get many complaints about the field. I think people realize that students are putting a lot of work into the facility and that when it comes down to it, they are still kids and they do make mistakes. If we do make mistakes, we've learned ways to repair them pretty quickly. ■