

Report: status of small school turfgrass education programs

WE ASKED SOME EDUCATORS at three community colleges and one 4-year institution about the status of their turfgrass programs. The questions were:

- 1. What is the trend in your turf program enrollment numbers—up, down or steady?
- 2. What are some of the reasons your students give for wanting to study turf management?
- 3. Have you made recently, or are you anticipating making in the near future, any changes to your program? If so, what and why?
- 4. What is your opinion on how turf management will be taught 10 years in the future?

CHAD FOLLIS,
Mineral Area College
Park Hills, MO

Follis is a horticulture instructor, greenhouse supervisor and baseball field manager.

1. Overall enrollment in horticulture is up. Those students wanting turf specific is steady this year.
2. Many of the anticipated answers are love of sports, love of outdoors, working with hands and equipment. In our rural area of southeast Missouri, turf management is still growing and new so there is some aspect of novelty also in the mix.
3. We have increased our end of program testing to assure employers and 4-year colleges our students are meeting necessary competencies. We also put in a NTEP-style variety trial over the past 2 school years. We now have 50 bermudagrasses, 13 zoysia and

eight buffalo, two St. Augustine, and two paspalum. We also installed 100+ cool-season grasses. All the basics, KYB, PRG, TTF, FF, Bent and a few outside the norm like faults alkali, poa triv, poa supina, micro clover. The students got behind this project. It allowed us to teach establishment of the various grasses and gave the students some hands on experience using equipment such as verticlers, aerators, etc. Thanks to all the folks that helped us with samples of live warm seasons and seed, too many to mention in this space. We are also trying to work out articulation with a couple 4-year institutions to smooth the transition process.

4. More and more online distance delivery of education. Students don't want to come to campus or at least want to limit the amount of trips per week. We have to determine how to deliver a hands-on outside careers driven education via a computer screen. How do we engage students fully, not just pass along PowerPoint slides? I also see STMA becoming more involved in how and what we teach in the classroom much in the model of the GCSAA. I think this will allow for increased matching competencies across the industry, which strengthens the knowledge base and gives employers the assurance they are getting individuals that can make a difference in their facilities immediately.

TROY MCQUILLEN,
Kirkwood Community College
Cedar Rapids, IA

McQuillen is a turf instructor.

1. Numbers are remaining steady, but something that is changing is the number

of students that are expressing interest in sports turf management. Currently I have 55 students in the program and I could say that 70% express interested in golf course maintenance and the other 30% are pursuing a sports turf career. This percentage is up from past years. I attribute this to increased sports turf opportunities in our area, having student participate in the STMA Conference, and shifting more curriculum and course competencies toward the sports turf experience.

2. Usually I ask the same question when a potential student enters my office for the first time. I would say the most common response is that the student likes the “hands on” portion of the career and the applied education. Students also comment on wanting to work outside, having a passion for the sport, or in some cases have worked a summer job involving a sports turf experience. They come to Kirkwood wanting more knowledge.

3. Every year the Kirkwood sports turf program hosts area sports turf managers for a 1-day advisory committee meeting. These members provide both curriculum and lab experience suggestions to our program so that the education and staying competitive with the industry. Besides the Athletic Field Maintenance class, students in our programs also take Irrigation Installation and Design, Intro to Turfgrass, Horticulture Math, Advanced Turfgrass, and Plant Material Maintenance among other classes that make up the 68-credit curriculum. Recently we have made changes to our internship where students are now required to complete an internship packet, followed by a presentation that identifies internship competencies they need to complete while on the internship, and then share that information with the incoming freshmen. We are also adding more transfer level coursework for those students that have an interest in pursuing 2 more years after



Kirkwood. These classes include Chem 2, Organic chem, Comp 2, etc.

The advisory committee and I also have been discussing the potential of an Advanced Soil Fertility and Chemical Reaction class. What I really like about the community college curriculum is that changes are not difficult to make and the advisory committee keeps up on the same track as the industry.

4. Good question. I see a lot more online training for either current credit students, or as a refresher course for existing industry professionals. The difficult aspect of online education is the “hands-on” factor. For me I always find it difficult to teach an objective without the hands-on lab activity.

I see 2-year institutions working closer with universities to make sure our students have the best transfer route. (We have made great progress already with this). In the near future for Iowa there will be a student shortage. In the state of Iowa the next largest senior classes are now in kindergarten! There

will be a competition for students. I think that high schools need to provide more horticulture courses for students that also include sports turf topics to let students know that these [offer] realistic careers.

I also see our curriculum having to make some adjustment with not only teaching students about sports turf, but also more coursework on facilities management, engineering, and lots of MATH. Sports turf managers are expected to perform it all, and we need to back it up with qualified training.

BRIAN SCOTT,
Mt. San Antonio College
Walnut, CA

Scott is a professor of horticulture.

1. It is difficult to get accurate figures for the number of students specifically in the turf program due to the way majors are reported on. Our typical student usually comes in with an unrelated declared major, or as a declared Horticulture Science major. It is quite a process for them to change their declared major and sometimes changing the

declared major impacts their financial aid. So, with that said, I will give you some information based on Certificates, Degrees and general observations. It is also important to understand that our typical student is around 30 years old, has a family and works either part or full time and attends school part time. I have students ranging in age from 18 to 70 years old, multi-racial, male and female. A quite eclectic bunch!

I have been at Mt. SAC going on 12 years. When I started we did not have a degree in Sports Turf Management. I implemented the Park and Sports Turf Management degree in 2003. Since that time we have awarded seven degrees. The certificate in Sports Turf Management, in the same time frame, has been awarded to 33 individuals. This certificate encompasses the core courses minus the general education requirements.

In just looking at ‘completers’, there is a steady trend. I can’t say numbers are up or down. The most certificates we awarded in one year were eight in 2008-2009. The least



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was one in 2004-2005. Degrees have been fairly consistent with 1 per year.

My general observations are that the program is gaining interest and enthusiasm to a higher degree every year. We have been taking eight students to compete in the STMA Student Challenge every year since 2009. Last year we had 12 students participate. When we first started, I had trouble getting four students to compete. Now we have tryouts and give them qualifying exams. I don't require that they are majoring in Sports Turf Management. In fact, I use the competition as more of a way to promote the sports turf industry. Many of the students have decided to seek employment in the sports turf industry after they go to the national conference and see what it is all about. By this measure, I would say that our program is growing and will continue to do so in the future. Our local industry is consistently seeking people who have knowledge of athletic field management.

2. This past spring (2012), we conducted some student focus groups to answer this type of question as well as several others. While the students who participated were from various disciplines within the Agricultural Sciences Department, I think the answers accurately reflect how students in every discipline within our department feel.

Participants described several attributes about the program that are working well and should be maintained:

- Hands on/practical experiences

- Ample industry contacts, networking opportunities, information about trends and job opportunities
- Teachers who are caring, down-to-earth, knowledgeable, and who convey their love for what they do
- Pride in the program among students and faculty
- Variety of classes/new computer-aided drafting course
- Good use of limited resources
- Everything!

Participants also stated what aspects of the program are less successful, offering program personnel opportunities to improve by:

- Incorporating technology in courses/program
- Developing more design/drawing curricula, as well as more advanced curricula
- Using industry trends to drive offerings
- Addressing class scheduling/availability
- Increasing program's limited resources
- Having more voice-of-the-student opportunities

This is all fairly general information. The students who specifically go into turf management typically like the environment of being around sports and like being outside. Also, it gives them an opportunity to take pride in their accomplishments.

3. We have recently changed our certificate program to be much more specialized. For instance, our sports turf certificate used to require 30 units of courses. Now it is 18. Our previous philosophy in our certificate programs was that we wanted to

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make sure students had a very broad knowledge base for all certificates. Now we feel that it is more important to provide certificates for very specialized subject matters. We also provide more certificates now (was 9, now 12) and have included a general Horticulture Science certificate for those who want to go wide but not as deep. We hope this will allow students to achieve certificates in a shorter time frame.

4. I see turf management, just like many other subjects, being taught from more of a “soft skills” and thinking on your feet mentality. When I first started teaching, I put so much emphasis on the details of the trade (for example, disease, insect and weed identification; fertilizer programs, etc.). As I have traveled and had discussions with many turf managers in different regions, it seems like all of the details change from site to site, region to region. It is impossible to consider all of the scenarios. Now, I do recognize the importance of the details, especially to universities who are training researchers. At the community college level, however, I don't see this as being one of my missions. I sure want them to understand the basics, and even the details when I think it will be extremely relevant. But I keep asking myself what details I remember from my college education. It was that I was taught how to think like a diagnostician, how to be a professional on all levels, and how to be resourceful. This sounds pretty basic, but the challenge for the future for me is developing curriculum that incorporates these concepts with the technical knowledge that students need to have when beginning their careers in sports turf management.

**DOUG LINDE, PHD, Delaware Valley College
Doylestown, PA**

Linde is professor of turf management at this 4-year college in southeastern PA.

1. We are staying steady around 30 total students. That number has been around 30 for the past 5 years. Most of our students are 19-22 years of age.

2. Like playing golf and want to work outdoors. Like sports and want to work outdoors on a sports field [are the major reasons].

3. I'm sensing in the near future we will have students take more basic sciences and less specialty classes. This will result in a more broad-based science education that would give them more flexibility in case of a career change. New graduates have no problem getting jobs upon graduation as long as they have work experience; however advancement to head field manager and head superintendent is much more difficult. So some graduates are switching careers. We also will be redesigning our required internship program to increase the academic rigor.

4. Professors will need to continue to adapt to the learning styles and preferences of the students. 18-22 year-old students' learning preferences will likely change due to technology, their habits, and teaching techniques they witness in high school. Also, students need professors less and less for the information about a subject. They need professors to evaluate information and use it to solve problems. ■

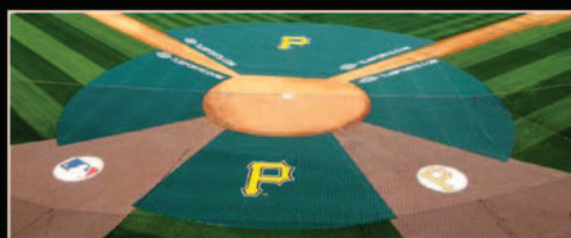
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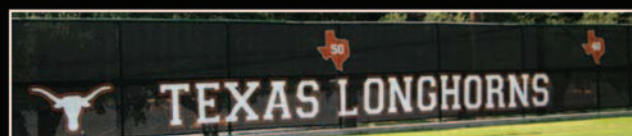
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