

MICHIGAN STATE'S DR. DAVID GILSTRAP: NO HOLDS BARRED ON THE SPORTS TURF INDUSTRY

Editor's note: Dr. David Gilstrap has been teaching turf students at Michigan State since 1993 and after 21 years he is stepping down as coordinator of the 2-year turf program having been a major influence on many of the most successful turf managers working today.

SportsTurf: What have been the most significant changes in turfgrass education you've experienced in your years at Michigan State?

Gilstrap: As far as formal education, the most significant changes have occurred in classroom technology and the methods by which instructors are expected to teach. Early on, I used transparencies or the blackboard, and the students had to take notes. Now, my PowerPoints are posted on the web so that students can print them off ahead of lecture and use to them to take notes. Fewer and fewer of them seem to be even doing that, however.

Now, unless you're taking attendance or giving pop quizzes, more and more students simply don't come to class, and it's only on exam days that you realize how large of a class it is. The fact that during lectures you are elaborating on the presentations, having meaningful discussions, and perhaps giving additional testable material doesn't matter to many students when you are spoon feeding them otherwise. From my perspective, I feel that we don't have as many outstanding students as we used to, and that the overall quality of students has declined over the past several years.

ST: What have been the most significant changes in turfgrass maintenance you've experienced in your years at Michigan State?

Gilstrap: From my perspective, it's been the increased expectations of sports fields, both in appearance and playability. This, in my opinion, has been urged on by the turf managers themselves who have shown just how good athletic fields can be. Learning and adhering to the basics can carry you a long way.

Now it's at the big-time stadiums that field maintenance has evolved to an elite level of expertise that is specific to us. I mean, that's not a golf course that had to host back-to-back major, major events like the Rose Bowl does this year. And, except for Willie Nelson's, golf courses aren't used for concerts.

It's also at this level, and we're speaking of my particular expertise, that fungicide use has become rampant. On a per unit area, there are MLB teams applying more fungicides than even golf greens get. The manager's rationale is "It's a relatively small area, I'm not that good with diseases, and I can't afford a screw up." I know that we're talking about enclosed areas, but this is Kentucky bluegrass and perennial ryegrass or bermudagrass—not creeping bentgrass and annual bluegrass, both of which are much more disease susceptible than Kentucky or bermuda.

ST: What's been special about your program?

Gilstrap: It was the first program to focus primarily on

▼ Heather Nabozny, left, head groundskeeper for the Detroit Tigers and a former Gilstrap student, with David at Comerica Park in 2008.





▲ **Left:** Dr. Gilstrap with his family in 2012; from L to R: Madeline, Paula, Katy, and Harry. **Middle:** Slappy Gilstrap performing at Willie Nelson's Fourth of July picnic in 1978. **Right:** Preparing for a calibration lab class circa 2003.

sports turf management instead of golf. And, I'm not sure but it still might be. The program's roots date back to 1989 when the owner of the Detroit area Toro dealer at the time, who had also done quite well operating the Barefoot Lawn franchises in Michigan, donated money. The program was christened the Lawn Care Technology Program and the idea was that lawn care companies would send their employees to MSU for education and training. Its coordinators, in quick succession, were Drs. Roch Gaussoin (now at Nebraska), Eric Miltner (formerly at Washington State and now with Agrium Advanced Technologies) and Paul Rieke, who changed the program's name to Lawn Care/Athletic Field Maintenance.

I took over in 1993 and quickly realized that the only hope for the program was to shift its focus to sports. The only lawn care students were those who already had their own small lawn cutting businesses going and wanted to learn more about turf, mainly applying fertilizers and spraying herbicides. That's been the case over the years with the last person having interest in lawn care having graduated about 5 years ago. As far as the original plan for this program, no lawn care company ever sent an employee to MSU.

As part of my vision to put athletic fields in the program's forefront, its name became Sports and Commercial Turf Management in 1996. Enrollment grew over the years to about half what was in the 2-year golf program, whose numbers were declining since its heyday during my first several years at MSU.

ST: How did this favorable work environment develop?

Gilstrap: There are several reasons for this. The first is that being a sports turf manager has become recognized as a profession rather than a vocation. The second is the success of minor league baseball, especially when ownership realized that there were college graduates (and interns) who had specialized in taking care of their fields. And, they could be hired for not that much more than they were paying former lawn care employees or school janitors on summer break. What they didn't know is that it would cost much more to retain the good ones.

Another reason is that field conditions, especially when they were poor, were getting more attention at the MLB and NFL levels. Disgruntled owners wanted things fixed, and GMs figured out they needed to hire college educated, experienced professionals. This led to favorable publicity for sports turf managers who were successful and who usually credited their education as being a key asset.

Consequently, more people began considering sports turf as a pos-

sible career. And as the number of students increased, the more interns there were, the more graduates, the more resumes being circulated, etc. This has caused upward pressure to hire those with college educations. Routinely, job postings specify such among the qualifications needed, particularly at the upper echelons of our industry.

Now I have many good friends who came up through the ranks without having formal turf educations, and I value their opinions and appreciate all the good they have done. However, they are contrary to what I have tried to accomplish, and I've told many of them exactly that, hopefully in a good-natured way. I can especially tell if they agree with me when they ask how much it would cost for their son or daughter to go through my program. If they're from out of state, the conversation moves to another topic.

ST: What role has STMA played?

Gilstrap: Students are of course interested in scholarships, but we have much fewer available than does the golf program. In state, the Michigan Turfgrass Foundation has a big one designated for sports turf students, and MISTMA does the best they can. Over the years, my program's students have done well with the SAFE scholarships, and that recognition and support is greatly appreciated.

Also, the Annual Conference and trade show is a great benefit to the students. And while the Student Challenge contest seems to be important to some attendees, I've never tutored the students beforehand, and I certainly haven't wanted them studying in their hotel rooms, when they could be out networking and generally having fun in the manner that many college students enjoy.

ST: What are some of the biggest challenges facing sports turf managers today?

Gilstrap: Besides traffic and Poa, I would say it's keeping up with all of the regulations and associated paperwork so that you and/or your organization doesn't get cited or sued.

ST: Can you speak to internships and how they have evolved?

Gilstrap: Internships are the cornerstone of any turf management program. Our golf program already had the model in place, which was that our spring semester courses were shortened so that our student could be on their internships at the end of March. This has and still gives us an advantage in that they get to be there before the season begins, as in professional baseball. Then, typically by the time any interns from other programs show up, our intern already has 5 weeks of training.

At first, there really weren't any internship in sports turf, so I had to procure them one by one. All along, I knew that most of the best ones would be in professional baseball since the dirt work was an art and not something we could teach them in classes. Also, there would be long hours that they needed to experience to know if they really

wanted to do sports turf as a career. After several years, my grads were getting good positions and they wanted interns. Many of them wanted to provide a better internship than they themselves had had.

My students used to have many choices about where to go, but with other programs competing for them, this isn't so true anymore. This brings me to a problem I have with some places hiring several interns, in some cases more than ten, and working them in shifts to avoid paying overtime. While I can certainly understand this from a business perspective, the students aren't getting the true experience of being one of the first to get there and last to leave, so to speak. Consequently, they really aren't finding out what they would be getting into career-wise.

ST: Which former students have attained the most notoriety in sports turf management?

Gilstrap: It has to be Heather Nabozny, who graduated in 1994 and became MLB's first female head groundskeeper with the Tigers in 1999, and 2008 grad Greg Elliott, who now has two rings (and big playoff checks) from being head groundskeeper with the San Francisco Giants. Both of them went straight to the big leagues from Class A teams. The 2012 World Series was the first time that both head groundskeepers were from the same program. They were set to reunite in SF if the series got to six games. I had USA Today and Fox Sports cued up, but the Tigers got swept and that story died.

ST: What can sports turf managers do to continue advancing their professionalism in the eyes of the public?

Gilstrap: They need to be more active in their communities. Reach out to local service clubs, who are always looking for speakers. Make a brief presentation and then field countless questions about caring for a lawn. Get to know reporters and give them your cell phone number. Wear clean clothes and be well groomed in case the cameras are rolling. Basically, promote yourself and you'll be helping market your organization. Your bosses will love it, and hopefully you'll be rewarded.

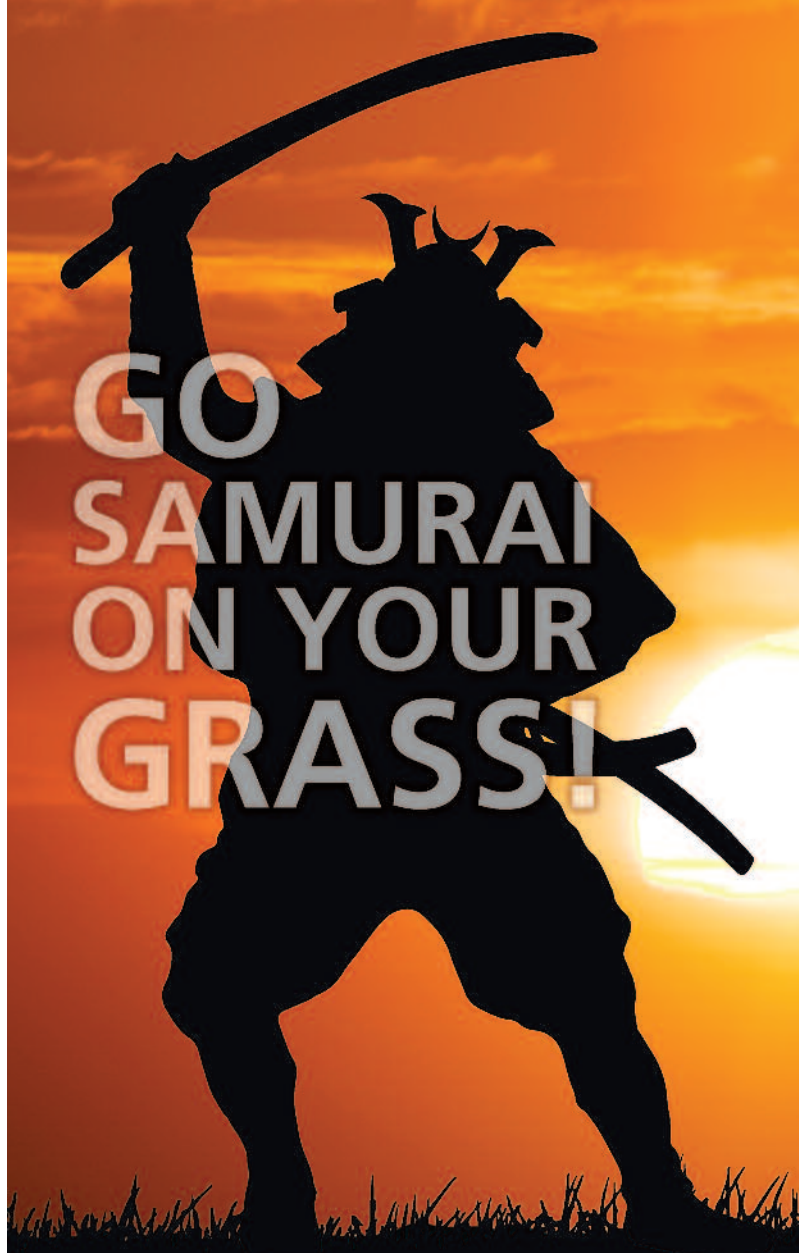
ST: How did you get into turf?

Gilstrap: Well, it took awhile since I spent 15 years trying to make it in the Austin music scene. One of the many day jobs I had was driving a cab, and by happenstance it led me to an interview with a statewide lawn and garden distributor. I had gotten a general ag degree from a small cow college in Texas, which enabled me to know somewhat about growing things. So, after a 15-year hiatus, I had a full-time job and said goodbye to the nightlife.

I started out packaging vegetable seeds and then moved into sales. In looking through the catalog, I noticed several products that could be sold to the golf courses I'd been playing while a musician. I had success and garnered enough pull with the superintendents (mostly Aggies) to be elected to the board of the Texas Turfgrass Association.

At my first meeting, Dr. Ed Runge, head of the Soil and Crop Sciences Department at A&M, apologized for not yet finding a suitable candidate for the fellowship that had been recently created by the association. Feeling I needed another change in my life, I retook the GRE that I had first taken 17 years earlier. The results indicated that perhaps

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I had not damaged as many brain cells over the years as I had feared, so I applied and was awarded the fellowship and studied under Dr. James Beard. I found a copy of Turfgrass Science and Culture at a used bookstore, read it from cover to cover, and realized that I had a latent turf gene that was now being expressed.

ST: What about going to grad school as an older student?

Gilstrap: Well that I certainly was since I had just turned 40! The R. C. Potts Fellowship paid \$15,000 a year, and while it was a significant pay cut for me, I was able to afford my own apartment and a bicycle. All I did was study except for going to the Dixie Chicken for Friday happy hour. I approached grad school like it was a full-time job.

The fellowship also paid for up to 15 credits tuition per semester. So, I foolishly signed up for a full load my first semester. It was only later that I found out that most grad students only took two or three courses at a time. Anyway, after the first round of exams my highest score was a 76, so I really put the work ethic in play and ended up acing every course. Dr. Beard couldn't believe it and really took an interest in me after that, which still exists to this day and for which I remain most appreciative.

Dr. Beard retired in 1992, so I hold the illustrious distinction of having been his last grad student. You might say it was me that drove him out of academia.

ST: Do you want to tell us a little more about your other life before turf?

Gilstrap: Sure, at least what I wouldn't mind my kids knowing if they end up reading this. I was the lead singer in a high school combo. We played mainly soul music and some early Stones and stuff like that. Besides school dances we had a good job playing at Gulf gas station grand openings in around Arlington and Ft. Worth. I started banging on the guitar when I was going to UT in the late 60's and got good enough to play along at house parties.

I transferred to Tarleton State University since my parents had bought some land west of Stephenville. I lived in a run down farm house and really only traveled the 18 miles into town to attend classes and sell firewood I had cut. So, it was there that I started writing songs. I would go back down to Austin from time to time and sing them to anyone who would listen.

After graduation, I took a job with a seed company up in the panhandle. Feed lots and sugar beets were big business and the aromas masked each other so that it smelled like a cow had eaten a Hershey bar. One day I got a call from Austin informing me that Jerry Jeff Walker was going to record one of my songs called "Ro-deo-deo Cowboy," and that I should think about getting back down there and getting my own thing going.

So, I quit my job and did move back to Austin. Jerry Jeff did record my song, albeit 5 years later. Anyway, it was the heyday of the cosmic cowboy, and I also got to know pickers like Willie, Doug Sahm, Michael Murphy, B W Stevenson, Jimmy Dale Gilmour, Joe Ely, and all the musicians, roadies, groupies, and assorted hangers on. The blues scene was emerging also, so I got to know many of them, too, including the Vaughn brothers. Along the way, several more of my songs were

recorded by me and others, but I only had the one that got on a major label, so far.

In later years, I joined Alvin Crow and the Pleasant Valley Boys and we played all over Texas, Oklahoma, and Louisiana. Then, I took a job as Jerry Jeff's stage manager and got to travel to 38 states until that fateful cab fare got me off the road.

ST: How did you get the job at MSU?

Gilstrap: While at A&M, I thought I could use some of Beard's connections in France and Italy hoping to land a job as a grow-in superintendent. Because of his retirement, I got to teach a course for non-turf majors called Recreational Turf, which would later have as many as 1,500 students a year and would also serve as the model for my World of Turf course here at MSU. MSU was advertising for two positions, one was Environmental Education Specialist (which Dr. Frank Rossi, now at Cornell had just left) and the other was the lawn care program coordinator. I was invited to interview in February, which I thought would be good since, as a native-born Texan, I thought I needed to see how bad the weather really was up there.

I did a 2-day, intensive interview for the first position and gave a seminar. Then, I turned around and did the same thing for the second position, except this time I met with the lawn care constituency rather than the golf people. I was 45 by then, so I suspect they wanted to see how I held up for those 4 days. I even stayed over the following weekend since I wanted to get more of the feel of East Lansing.

I had expressed my desire to go on for a Ph D, and after the interviews were completed, Dr. Bruce Branham (now at Illinois) said that wouldn't be possible if I became the environmental specialist. This was because it was an extension-type job where I would be out working with the state's golf courses and wouldn't be able to complete my course work. However, if I was interested in the lawn care position, then perhaps I could start grad work after I got the program on its feet.

Earlier in the year, I had interviewed for a sales position with Milorganite and a teaching position at Horry-Georgetown Technical College in Myrtle Beach. However, each March here in Michigan, I think about whether I'd been better off in Myrtle Beach. I had standing offers from both of them, but they each said they would wait until I had interviewed in Michigan. In early March, I was offered the coordinator position. I thought of it as having been with the Rangers or Astros and the Yankees wanted me.

ST: And you didn't get your Ph. D. until you got to MSU?

Gilstrap: Yes, and it took quite awhile. Turf pathologist Joe Vargas was my major professor. He and Beard had a great friendship that started back when Beard was at MSU in the 70's. Back when I was in sales, I had developed an interest in diseases and fungicides, which were very expensive. And I knew I could deliver a higher-priced order with just my pickup. I knew from listening to Vargas give talks and then later interviewing with him, that he and Beard were very different in personalities and approaches toward life. So, in my mind I thought if I could synthesize some qualities from two giants in the turf industry, I might end up with something pretty unique. Vargas

agreed to sponsor me, and the fact that I didn't need a stipend or tuition paid for probably helped that decision.

During my first fall in East Lansing, I met Paula Manderfield. She was a district judge, and we were married within 2 years. We then had three children, with the last two being twins that required my wife to be on bed rest for the last 5 months of the pregnancy. So, I was caring for her and our 18-month-old daughter. Then, about a year after the twins were born, she decided to run for circuit court, in which she came in first against two incumbents and a sitting state representative. I had never been in a big campaign like that, but think goodness she had. It was a great experience, and I think my 2 years I'd worked as a roadie really helped our drive and perseverance.

So, all along I'm taking a course each semester and putting out treatments all summer and fall. Vargas's grad student ahead of me, Rob Golembiewski, now with Bayer, was in the process of documenting the first instances of dollar spot resistance to DMI fungicides and how to manage it. I helped him finish up and then started a study to try and determine how long it would take for the same resistance to develop in a virgin sward, so to speak.

After 5 years of spraying Banner at 4x rates four times a year, I did see enough of a shift that my committee approved me going forward with writing my thesis. After awhile my wife said she was tired of hearing about it and that I should either get the thing done or forget about it. With that blessing, I focused on my writing and often slept in my office when I was on a roll.

Looking back at the qualifying written and oral exams, and especially at the oral defense of the thesis, I think that getting through the process, particularly for a terminal degree, is a form of intellectual hazing. At any rate, I finally got my Ph D in 2007, and 6 months later I doubt if more than a handful of people in my department even knew what I had done it on. At any rate, I had finally joined the club, so to speak, at 59 years of age and I'm glad I persevered.

ST: What accomplishments in your career make you the most proud?

Gilstrap: My first answer has to do with the successes of my students both on and off the field. Back in 1993, there were only a handful of people in sports turf that I knew had formal turf educations. So I began my quest of putting more of them into and onto the field. By the early 2000s, I was making the claim that MSU had more graduates in the industry than all the other states' programs combined. While this is no longer the case since nearly all the other turf programs have and have had at least some sports turf students, I will say that MSU still has the most out there.

Also, I volunteered to be the director of our dual degree program with four Chinese universities. I took it from its inception in 2003 through graduating its first class in 2008. It was our university president's idea and she chose turf to be the guinea pig. It's still going on and has more than 400 grads, some of which are actually working on golf courses in China.

Finally, I'm still continuing to research the bermudagrass that was brought to MSU by W. J. Beal as part of the nation's first turfgrass research in the 1880s. It's now spread throughout the campus and looks

quite good where it's mowed regularly and fertilized. The cultivar has been documented in the scientific literature as being the most cold tolerant. Through DNA fingerprinting, I've discovered that it is a clone. This means it has the potential to be patented, and I'm working toward securing the funding to do that.

ST: Do you have any major career disappointments?

Gilstrap: Sure I do, and not being able to recruit and graduate more students tops the list. My incoming class sizes ranged from eighteen to six. My graduating class size ranged from twelve to five. I had greater attrition with the larger groups because I wasn't giving all of them the attention they needed. With the smaller classes, I did my best to make sure none of them fell by the wayside. Also, I regret not leaving a program big enough that it necessitates its own coordinator, instead of the shared model it's going to.

ST: Is there something you wish you had done that you did not?

Gilstrap: I know I should have published more, but I was lazy in this regard since it didn't count much in my year-end evaluations because I didn't have a research appointment.

ST: What are your plans in retirement?

Gilstrap: First, of all I'm not retiring! My kids are 16, 14, and 14. So, how can I? Instead, I'm moving to a 9-month appointment with my primary duties being the teaching of an online course entitled World of Turf, which I designed and developed it for non-turf students across the campus. Enrollment numbers have grown remarkably since I shifted the format to an entirely online offering. In fact I have 300 students taking the course this spring.

ST: What about the program's future?

Gilstrap: Coordination of the sports turf program will transition to Dr. Trey Rogers, who has been in charge of the highly successful 2-year golf turf management program since the late eighties. Dr. Rogers has been a leader in sports turf research having pioneered and perfected the portable field concept. He has assured me and wants all of our graduates to be secure in knowing that the two programs will remain separate, and that the only change that may take place is that the commercial turf part of the program's name may be dropped, since the primary interest of its students lately has indeed been on the sports side.

ST: What's the greatest challenge facing the STMA as an organization?

Gilstrap: In my opinion, the STMA is conspicuously incomplete or it's fractured at best. This is because the MLB and the NFL have their own distinctly separate meetings, and for this reason many of them don't attend the STMA conference and consequently, some of them are no longer members, if they ever were. You don't hear about the superintendents who host PGA Tour events going off and meeting by themselves instead of attending the Golf Industry Show. So, until the STMA can figure out how to get as many of the elite practitioners as possible to participate, the organization can't be truly representative of the profession. ■