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## Join. Participate. Get involved

The rewards are many for industry involvement. What's your excuse?

#### by Bruce Williams

he golf and turfgrass industries are very well organized thanks to a variety of membership associations and foundations. Each and every one of those groups is led by individuals who have chosen to step up and get involved. It seems like the old adage was never truer with 5 percent of the people in chapters and associations doing the work for the other 95 percent.

I truly believe more people would get involved in leadership positions if they knew the need, the benefits and the purpose of taking on added responsibility. I have yet to see an individual who hasn't prospered from board service and, likewise, organizations that have not prospered from what volunteers have to offer.

HOW DO WE VOLUNTEER? Superintendents often believe they are not worthy of board service. In fact, nothing could be further from the truth. Every superintendent has something to offer. It starts off with a willingness to give time. A commitment to board service takes time. It's easy to calculate the number of chapter meetings and board meetings that any assignment will require. Chapter service, according to my estimates, requires an extra 10 or so hours a month. This will increase if one chooses to continue service at an officer level. So if you can spare the time the fruits of your labor will be bountiful. Yes, some chapters have contested elections and nobody likes to run for a board position and lose. It may take a couple of years to get elected. Hard work and persistence pay off. I have known more than a few individuals who ran three times before being elected to boards including the GCSAA. Some of those individuals went on to become presidents of their respective organizations.

First things first and you need to join professional organizations such as GCSAA chapters and turfgrass foundations. Participate and get involved. Attend as many meetings as possible and communicate the value of such organizations to your employer. While attending all meetings is an admirable goal, it must be realized that we all have family obligations and work commitments that may take precedence during the year. Pick and choose wisely and manage your time well so a balance between work, life and leadership exists.

Once you join an organization and actively attend meetings, it is best to get involved at the committee level. Typical committee involvement requires just a few extra hours per month. Superintendents serve on committees such as tournament, education, trade show, PR, communications and newsletter. Committee service is about getting the job done and making programs better. We are fortunate today to have so many talented chapter executives who carry out the direction offered by committees and boards.

Chapters are always looking for speakers at monthly meetings. They also are always looking for industry pros to write articles for their newsletters. Not only is this a great way to get involved with minimal time commitment, but it also provides exposure for a superintendent and allows other chapter members to see his/ her talents. Many future chapter leaders come from the ranks of speakers and writers.

WHY DO WE VOLUNTEER? There must be some compelling reasons for wanting to step up and volunteer. Not everyone is motivated by the same things, so I hope to outline some good reasons to get involved at a leadership level.

Board service can advance your career. If you are looking to move up the career ladder I can think of no better way than to serve. It is no coincidence that some of the better jobs in your market seek out broadly qualified people. The people who are hiring superintendents are leaders themselves and leaders are attracted to leaders.

A variety of job skills are developed and enhanced through board service. I enjoy seeing the significant improvement of professionalism that grows parallel to board service. Public speaking and writing skills are two notable qualities. Through practice, participation and learning from peers we are all better off after 8-9 years of board service.

Time management becomes a necessity as we take on more commitments. Fellow board members become mentors and show us the way to provide a proper balance personally and professionally.

Other notable learned skills include: budgeting, strategic planning, communication, technology, management and overall leadership.

Lastly, volunteering brings fun and fulfillment to your life. Some of our basic needs include getting involved and having a feeling of being in-the-know on things. Learn to work in a group, promote change, develop consensus and debate outcomes. Have fun while being involved with your fellow board members. Know that each year you serve you will become more fulfilled with the accomplishments that the board, as a group, makes on behalf of its members.

**HOW DO YOU KNOW IF IT IS FOR YOU?** I suggest anyone considering serving their chapter, association or foundation do a little homework before taking the leap. Seek out existing leaders and former board members to see what it has meant to them. A few of the questions that should be asked include:

• How much time commitment was involved at each level of board service?

• What was most difficult about board service?

• If you had it to do over again would you serve?

• List the advantages derived from your board service.

You should quickly see that few have any regrets. There is much more upside than downside. All we can ask for in life is to have win-win scenarios and service provides that opportunity.

#### **Personal ROI**

Volunteering brings a deep sense of return on investment, often at no cost other than of yourself and your time. Here are some additional motivating factors for getting involved.

- Feeling needed
- Sharing a skill
- Demonstrate a commitment to the industry
- · Gain leadership skills
- A sense of accomplishment
- Recognition
- Making an impact
- Learning new things
- To become an insider
- A feeling of pride
- Testing yourself
- Building your resume
- Becoming a change agent
- To stand up and be counted

#### PROFESSIONAL DEVELOPMENT



I have yet to see an individual who hasn't prospered from board service and, likewise, organizations that have not prospered from all volunteers have to offer and give.

While a lot of what I've outlined is focused on superintendents there are opportunities at a variety of organizations. Let's explore a few of those general categories and see what fits you best. Often leaders in one group are sought out for leadership roles in other allied organizations.

There are close to 100 chapters of GCSAA in North America. Each chapter covers a specific geographic area. Some chapters are as small in size and geography as having a 50-mile radius in a metropolitan area while others cover multiple states. Most of these chapters have been around from 50 to 80 years. They are well organized and most have paid chapter managers. Chapter managers carry the heaviest burden and are compensated accordingly. Volunteers for board service will have time commitments, but more importantly they must set the direction for the organization. With approximately 100 chapters and an average of nine board members per chapter, that means roughly 900 superintendent members are theoretically in leadership positions each and every year. Most, but not all, chapter boards require Class-A members, so this does take up approximately 17 percent of eligible volunteers (5,300 GCSAA Class A members). Considering a potential 40-year career in this industry, if no one ever repeated in office, then 68 percent of eligible superintendents would have to serve to cover all the various chapter leadership positions.

Beyond chapters there are a variety of regional associations that include turfgrass foundations and turfgrass associations. Recent years have also seen initiatives in turfgrass research groups and also active university alumni associations. Similar to chapters, most of these groups have paid leaders who carry out the daily and annual tasks of running the organizations. Leadership is charged with setting goals and assisting in driving the programs that make these organizations successful. With the recent economic downturn it is more important than ever before that outside funding assist our research programs at diverse geographic locations throughout the country. Each of these organizations seeks leaders just like chapters. That provides a great opportunity for superintendents and commercial members to work together to support the golf course industry.

The ultimate leadership roles would be with organizations like GCSAA, Canadian GCSA and British International Greenkeepers Association. Prior experience is required. Other than that, those major groups are looking for the same qualities in any individual. They want those superintendents who have the time, desire, talent and proper attitude it takes to make an organization better. As you might imagine, the time commitment increases at this level but so do the benefits to you and your career.

One of the challenges of governance is identifying the leaders of tomorrow. A typical board of nine individuals carries the load of 100 to 600 members. Each year there are normally one or two open positions to serve on such boards. This leaves 90 to 590 potential board members. Most boards look to existing committee members to fill open slots. These people are involved and have shown a commitment to advancing the profession.

It is necessary for each group to encourage and entice members to get involved. Sadly, I see many groups having to go back to former leaders because new blood isn't willing to step up, and get involved. This is a problem in that we are not growing the leaders of tomorrow. However, there is some value to recycling the sage advice of those who have served before, so it is not all bad.

Boards should be diversified. That includes a cross section of low-, middle- and high-budget clubs. It should reflect the ethnic and gender diversity of the membership base. The inclusion of assistant superintendents and commercial members should be considered because they make governing groups stronger. As a side note, seldom do I see an active recruiting program to develop the talent of tomorrow.

Many of us have sat on nominating committees at the local, regional and national level and we have a difficult time coming up with nominees. This has to change. I do believe the development of a recruitment

packet would strongly benefit each organization. If a group were to provide its mission statement, goals and objectives along with a history of the leaders of the group, then that would be a good start. Use the information from this article to cover who can serve and what steps it takes to get involved. Obviously, there are benefits to service. When recruiting people these benefits should be a strong part of the push to get someone involved.

In short, step up and you will not regret it. Make leadership a priority in your career plan. It is the right thing to do. And where we would be in this great industry without all of those who led before us? **GCI** 

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The use of plastic lattice helps to alleviate stress on putting green collars.

## Twist and shout no more

Plastic lattice provides a simple solution to overstressed green collars.

By Darren Davis

aintaining a good stand of grass on the putting green and collar is perhaps one of the primary responsibilities of today's golf course superintendent. Greens are always priority No. 1, and the reputation of the course and superintendent is often determined by their condition. Amazingly, when the greens are good, most other inconsistencies on the course are usually overlooked.

Technological advancements and research have provided today's golf course superintendent with improved equipment, better techniques and added knowledge, enabling them to better maintain closely cut, heavily trafficked turf. However, when encountering stress in the midst of the winter golf season, such as the extremely cold and cloudy winter of 2010, turfgrass management often involves using whatever means necessary to keep grass alive.

Veteran golf course superintendent Jim Whalen at Calusa Pines in Naples, has worked at some prestigious golf courses in his career. Among them, Augusta National Golf Club and Congressional Country Club are on his resume. Similar to Augusta and Congressional, Calusa Pines prides itself on providing a

### Turning on the lattice alleviates the twisting and subsequent tearing or thinning of the turfgrass in areas that are under the most stress.

challenging golfing experience with lightening fast greens.

At Calusa Pines, due to a very low height of cut and frequency of mowing and rolling, the edges and collars of some greens need a little extra attention. In part, due to the challenging Winter of 2010, Whalen instituted a practice that helps to alleviate stress on his putting green collars.

Whalen purchased a dozen sheets of ½inch by 23½-inch by 95-inch white garden plastic lattice from Home Depot at a cost of \$11.97 each. The greens mowing crews transport the lightweight sheets of plastic lattice each morning in the backs of their utility vehicles. Before mowing, the sheets are laid flat on the collar in areas where the walking mowers normally make their turns. Turning on the lattice alleviates the twisting and subsequent tearing or thinning of the turfgrass in areas that are under the most stress. While at Congressional, Whalen witnessed a similar technique where plywood was used for the same purpose. He feels the lattice is equally effective, more durable and much easier for the crew to handle. **GCI** 

Darren J. Davis is superintendent at Olde Florida Golf Club in Naples, Fla.

#### **EDITOR'S NOTE**





White plastic garden lattice costs about \$12 each from Home Depot.

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## Real Science

H BY PAUL R. GIORDANO AND JOSEPH M. VARGAS JR.

## Yes, Virginia, there is a new bacterial disease

While research – and questions – about bacterial wilt continues, some puzzle pieces are falling into place.



Typical symptoms of etiolation on an annual bluegrass putting green in late summer.

n article entitled "The Wilt that Wasn't" was published in GCI that attempted to provide insight into the tumultuous world of plant pathology and the academic quarrels that are often encountered in scientific research. That particular article touched on "bacterial wilt" of creeping bentgrass, initially hypothesized to be caused by the bacterium Acidovorax avenae; an issue that has been at the forefront of superintendent's minds for the last few years. At the time of publication, very little research pertaining to Acidovorax in creeping bentgrass had been published. Additionally, anecdotal accounts from various regions around the country made for a noncohesive, convoluted summary that was confusing.

This article is intended to shed a bit of light, rather than heat, on the subject of bacterial etiolation and decline of creeping bentgrass by providing some historical context, and more importantly, empirical evidence of the current and ongoing research with this emerging disease.

In the 1980's, a new disease was identified that changed the way we think about turfgrass pathogens. The disease was bacterial wilt of 'Toronto' creeping bentgrass, caused by a Xanthomonas bacterium. This was important, as it was the first major bacterial disease of amenity turfgrass, and for several years a good deal of controversy surrounded this new disease and its cause. Since then, a few researchers have dedicated much time and effort characterizing that and another closely related Xanthomonas pathogen of annual bluegrass. Today, the vegetative cultivars of creeping bentgrass such as Toronto, and the diseases that affect them are largely a thing of the past; however, bacterial wilt on annual bluegrass greens, tees and fairways is still a common problem every year, all around the country. One distinct characteristic of the disease on annual bluegrass is the yellowing and overgrowth or etiolation (Ee-tee-oh-lay-shun) that is often observed during cooler weather conditions.

As they say, history repeats itself. Nearly 30 years after the 'Toronto' C-15 bacterial wilt scare at Butler National, a new controversy began to emerge with its focal point being a championship golf course in the greater Charlotte, N.C., area. A recurring problem of yellowing, etiolation, and eventual decline of irregularly-shaped areas on the creeping bentgrass putting greens was plaguing the club, and even with an unlimited budget to manage it, nothing seemed to be working. For several years, samples were sent to labs around the country in an attempt to get a disease diagnosis, still nothing seemed to work. In 2009, we received a sample exhibiting unique symptoms with a letter and an overview of management practices. After ruling out the "usual suspects" and having little luck making sense of the situation, our efforts turned to looking for a bacterial pathogen. This notion was based on the similar symp-



A naturally infected creeping bentgrass putting green with symptoms of etiolation and yellowing in irregular areas.

toms in the creeping bentgrass sample to those often seen on annual bluegrass affected with the bacterial wilt pathogen, *Xanthomonas translucens*.

Enough storytelling, how about some science?

To our surprise, when the affected stems of bentgrass were cut into, heavy amounts of bacteria were observed microscopically streaming out of the cut end of the plant. The quantities of bacteria observed in the affected bentgrass plants were alarming and warranted further investigation without a doubt. From that point, research efforts were underway to isolate and characterize this bacterial culprit.

Since there are roughly thousands of different bacterial species that live in turfgrass systems, and all of them are microscopic, the job of discerning which one is truly the problem can be challenging. Measures must be taken to isolate the most prevalent bacterium from the samples. To achieve this we employed a technique known



Disease ratings on tested cultivars of creeping bentgrass subjected to *Acidovorax* inoculations. Disease ratings were taken 14 days after inoculation and incubation at 86° F.

### **Real Science**

Etiolation symptom induced after root-dip inoculation strategy. Note the yellowing and extended growth of the plant.

Etiolation observed on inoculated field plots at Michigan State University. Confirmation of bacterial colonization in plants (top left).

as a serial dilution where samples were diluted up to 1:1,000,000 with sterile water before plating onto agar media. This process selects for organisms in high enough abundance to survive the dilution, and disfavors those that are in low numbers living on or within plants. Once a few viable candidates emerged on plates, they were grown and tested for their ability to infect healthy creeping bentgrass.

The initial tests consisted of dipping sterile scissors into a liquid suspension of each bacterium and trimming plants with the dipped scissors. This allows the bacteria to enter into the open wound created by the fresh cut, and is necessary because unlike fungi, bacteria are unable to directly penetrate plants and require a wound or natural opening to get in. These initial inoculations showed only one of the bacterial culprits to be capable of causing significant disease symptoms; excitingly named MSU1. Once this observation was confirmed with repeated inoculations, the bacterium was re-isolated out of the inoculated turfgrass, and DNA was sequenced to determine its identity. The bacterium was found to be in the *Acidovorax* genus, and had DNA most closely resembling that of Acidovorax avenae subsp. avenae. It was at this point that a "First Report" was published in the journal Plant Disease.

Word spreads fast in the turfgrass industry, and soon a firestorm of discussions and postings related to the new "bacterial wilt" could be found on the web. Rampant speculation and misdiagnoses followed during the infamous summer of 2010, which undoubtedly contributed to the controversial nature of the emerging problem. At this point, the research being conducted on the new bacterial disease was still in its infancy, and any information regarding the disease was largely anecdotal. Researchers around the country were beginning to look further into the matter, and the USGA took proactive measures to address the issue by funding projects at several universities

around the country. MSU's research was undertaken with some specific objectives, many of which require a great deal of time and resources to accomplish. This is yet another factor that perpetuated the speculative nature of the disease; the lack of immediate data or published information. While research is ongoing, pieces of the puzzle are falling into place while progress is lacking on others.

WHAT WE KNOW. The bacterium Acidovorax avenae subsp. avenae is pathogenic on creeping bentgrass; this much we know. An early objective, however, was to determine if the disease was specific to particular bentgrass cultivars. We tested several common cultivars of creeping bentgrass for their susceptibility to Acidovorax infection, and found that all were susceptible to some extent. There were, however, some significant differences in the level of susceptibility of Declaration and Tyee when compared to the other cultivars. Research conducted at the University of Rhode Island by Dr. Nathaniel Mitkowski has confirmed similar results with several other cultivars of creeping bentgrass. These results confirm the non-specific nature of Acidovorax and its ability to infect creeping bentgrass; however, recommendations regarding particular cultivars to turf managers battling the disease are unwarranted until extensive field studies can confirm truly resistant or tolerant cultivars.

We also know that the disease is more widespread than Charlotte, NC, but still relatively sparse. To date, researchers at Universities such as MSU, URI, Clemson, NC State, Purdue and several others have successfully isolated the *Acidovorax* pathogen out of more than 50 infected bentgrass samples from golf courses across the country. A large majority of the samples at MSU have come from the transition zone and Mid-Atlantic regions of the U.S. However, several have come from golf courses in the upper and lower Midwest.

Observations made over the past several seasons have lead to the hypothesis that this new disease may be "stress-related." Since symptoms are most commonly seen on intensively managed putting greens and are often located in highly trafficked or mechanically stressed areas, the pathogen has been considered a bi-product of turfgrass stress. Understand that all pathogens

