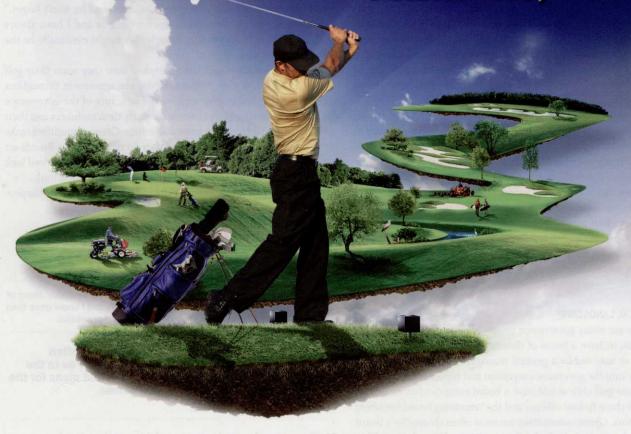


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A Game Changer

here are a number of classes that could be added to golf course superintendents' curriculum during their college years. You can't learn everything in college and some things must be taught through practical experience. Understanding the politics of a golf club or facility is essential to long-term employment and success at any golf course.

Just like greenkeeping, politics is an art and a science. It is concerned with the guiding or influencing of policy at any given golf facility. The science part is the political organizational chart that describes the hierarchy in a "perfect" setting. We all know that seldom does that perfect setting exist and there are a lot of variables and pressures that come from outside of the formal hierarchy.

People are passionate about their clubs and that is why they belong to them. Many well-meaning people want nothing but the best. If we channel that passion and energy into developing positive programs, practices and budgets that will accomplish the goals of the club, then we can successfully navigate the political waters of private golf clubs.

THE POLITICAL LANDSCAPE

While there are many governance structures it is most common, in private clubs, to have a board of directors and a committee system. There may or may not be a general manager or director of golf but they all play into the governance equation and reporting structure. A typical private golf club would have a board comprised of nine individuals with three to four officers and the remaining board members being directors. Green committees are most often chaired by a board member and are comprised of a cross section of the club's golfing members. This should include both the men and women of the club and all levels of playing skill.

In most scenarios of private clubs the members are equity owners of the club. Membership may vary from 250-750 members for an 18-hole golf course. It is important to remember that each and every one of those members is an owner. While they may have no official authority over the golf course superintendent they surely have influence as a shareholder in the business. Some may have more influence than others and it is important to understand who the movers and shakers are in any club. Every club seems to have a handful of members who can and do exert influence over the elected board and appointed committees.

Never underestimate the influence of any one individual at your facility. It is important to treat all members as though they could be your boss in the future. I had a summer job at a very nice private club while I was in college. The golf course was surrounded by homes and many of them were residences of club members. Just outside of one property line there was a tee that each weekend would be littered by empty beverage cans and such. I suggested to the golf course superintendent that we speak to the father (a club member) of the kids who were having a party and littering each weekend. The superintendent told me to take 5 minutes and clean it up. He followed that comment

with "If you plan on staying at a club for 20 years or more that kid could eventually become your green chairman and he won't forget." I surely never forgot that lesson in club politics and I have always tried to treat every member as though they might eventually be the person I report to.

Everyone that plays golf has an idea of how they want their golf course to look and play. Seldom do you see agreement throughout an entire club. That is why we have the structure of the governance hierarchy. When the system works properly then members and their spouses provide input to the green committee. Green committees make recommendations to the board and they do not set policy. Boards set policy and ideally provide the funding to accomplish the desired look and playing conditions that the members want and can afford.

Once again this is a perfect scenario and seldom does this happen.

TAKE AWAY TIPS

Here a couple of key components to best deal with club politics. Many of these were shared with me by mentors and friends and I know more than a few that will apply to make you more successful.

Know the influential people that have no official authority but have significant impact on club operations as "when they talk everybody listens." Communicate often and effectively as to the programs and plans for the golf course.

Know and understand the elected and appointed officials at your club.

In a club that has divided opinions over projects and direction make sure not to hitch your horse to the wrong wagon. Know what the majority of the members want via formal or informal surveys.

Treat every member and their families as though they could be your next boss.

Board and committee members want the best value they can have and it is up to the superintendent to develop the plans to provide the best product they can afford.

The golf course belongs to the members and while superintendents have pride in the course they need to understand that the golf course is not theirs.

No two clubs are the same.

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It is important to remember that **each and every one of those members is an owner**. While they may have no official authority over the golf course superintendent they surely have influence as a shareholder in the business."

There are many agendas at most clubs. Some want the course firm and fast while others prefer it to be green and lush. Some members want U.S. Open conditions daily and anything less is unacceptable. It is the responsibility of the green committee to filter the many thoughts of club members and work with the golf course superintendent to develop appropriate maintenance standards and long range plans to achieve the goals of the membership.

FEEDBACK

One of the best ways to gauge the desires of the membership is to conduct a survey. Some clubs do this internally and may have the right team to develop the appropriate questions. In my experience it has been preferable to use consultants that understand the business to develop the survey. Consultants like McMahon Group utilize a survey that not only looks at the golf course but at the entire club operation as well. The typical questions are asked regarding levels of conditioning but more importantly prioritization of those items and the means to pay for them.

Part of the politics in a club is gaining consensus on conditioning of the golf course. There are several ways to manage the process. In this economy many facilities have had to cut back their budgets resulting in reduced staffing and resources. To a point, efficiencies can be created that will have little impact on the long term protection of the asset -- namely the golf course. Successful golf course superintendents need to work through the green and finance committees to develop plans that will be affordable and accomplish the goals of the majority of the membership. Telling the membership what they should do is a big mistake. While they value your input they surely want to learn more about their options and what it takes to provide conditioning at various levels they can afford. Never forget that it is not your golf course – it belongs to the membership.

STANDARDS

With recent budget and staff cuts it is important for clubs to go back and analyze their written maintenance standards and make sure the standards are in line with the expenses. Even in a good economy when standards change then resources must reflect that change as well.

A major dilemma at many clubs is a lack of alignment of budgets to standards. The worst case scenario is when a club wants to raise their conditioning standards while decreasing their manpower and overall budget.

COMMUNICATION

One of the biggest components of club politics is communication. Golf course superintendents need to spend a fair amount of time developing plans and alternatives in a changing golf business environment. I have worked with clubs to provide them alternatives for 10-to 30-percent budget reductions. The political part of the equation is educating and

communicating the effect of those cost reductions. Clubs do not have to give up great conditions on their greens and main playing surfaces but the periphery might not be as detailed as what members had been accustomed to. This concept needs to be supported by the committees, the board and eventually the entire membership. If it is not then people will think the superintendent is not doing his or her job.

Years ago most information regarding the golf course was shared with the green committee members and occasionally the board of directors. Today that would be a recipe for disaster. Club members play a lot of other golf courses and are constantly comparing their course to others they play. Often times this is done without knowledge of staffing levels and other resources to provide those conditions. There are many variables that go into golf course conditions that would include: soil types, irrigation system, grass types, drainage and equipment provided.

Golf course superintendents are most effective when they spend the time to communicate with as many members as possible and educate them on the business side of golf course management. Today this can be done through blogs, email updates, newsletters, town hall meetings and overall interaction with the membership. Each and every year new members join the club and new faces appear on the committee and the board. No two people are alike and an intuitive superintendent finds out quickly the best way to deal with the many personalities in the governance structure. Some people like lengthy detailed information while others like a short summary. Be sure to understand that your communications are both what the leaders want and in a form they are most likely to absorb.

When I think of the superintendents that have been employed by their clubs for a quarter of a century or more I find that the common denominator is their ability to understand their membership, communicate clearly to them and provide golf course conditions that are acceptable by the majority of the membership. They have learned how to manage club politics in a most effective way. **GCI**

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Monroe Miller is a retired golf course superintendent.

He spent 36 years as superintendent at Blackhawk Country Club in Madison, Wis. Miller can be reached at groots@charter.net.

SO WHAT IF GIS IS SMALL?

hen was the last time you could stand on one end of the equipment show and see the other end?" asked one GCSAA member of another as they surveyed the show floor at February's annual industry conference and show.

It was an oft-asked question in Orlando. I didn't actually hear anyone complain about a smaller show floor and fewer exhibitors. The comments were mostly an expression of mild surprise and maybe even approval.

Clearly, these observations were made by superintendents who worked during golf's boom times of the not too distant past and who have seen the "big" shows. Grizzled old veterans, like myself, can remember a time when a show the size of 2011's would have been huge; there have been regional turf shows in recent times that rivaled in size the first GCSAA shows I attended in the early 1970s.

In many ways a smaller show floor is better – even much better. You have a chance to see all of the booths and exhibits. A smaller show gives you time to do some serious shopping, spend time with manufacturers and look long and hard at machinery and products that interest you. You can question engineers and research scientists who are at the show for that exact purpose.

A smaller show is more social because you have the time to stop and talk with colleagues and friends you may only get to see at a conference. For me, that includes people I've known for nearly four decades now. Seeing them is very important to me.

And, when you are on my side of, say 50, physical demands of a smaller show are more reasonable. A show like Orlando provides areas to sit, relax, chat and enjoy lunch. Some past venues provided absolutely no relief from sore feet and a tired back.

In fact, one reason I didn't like the first couple of shows shared with CMAA was their enormity. Before organizers got smart, the two interests – golf course and clubhouse – were so totally integrated you had to walk the entire show floor just to see course management products.

The size of this year's show reflected the economic realities of our times. In past years, when we had a big banquet dinner and entertainment, attendance figures were announced from the head table with great fanfare. It was expected each conference and show would break the previous year's attendance. "The bigger the better"

"Before organizers got smart, the two interests – golf course and clubhouse – were so totally integrated you had to walk the entire show floor just to see course management products."

was the goal. Those were the zenith days of golf and they are over, at least for a while. In singing the praises of a smaller equipment show, I admit to the luxury of ignoring the revenue aspects of a larger one. The advantages for me are worth whatever that cost is. GCSAA is managing their economic situation pretty well, as near as I can tell. Attending the conference and show is still a very worthwhile and terrific experience.

Even if it is smaller.

Let me finish with an expense report of my successor and his assistant, Chad Grimm and Jake Schneider. They had another productive and enjoyable conference, and they didn't break their travel budget to do it. Here's how they attended the Orlando GIS for only a \$306 charge to their education budget.

A former summer employee now works for an exhibitor at the show and invited them to ride to Orlando with him. They bunked with him on the overnight during the trip to Orlando. In the time leading up to departure they kept an eye open for a cheap flight home, found one and paid for it with World Points from their golf course charge card.

2 They stayed with three other people in a condo just south of the Hilton Hotel and only had to pay 40 percent of the bill. They also prepared almost all of their meals at the condo and shared the grocery bill; other meals were taken as business clients, in hospitality rooms or GCSAA events. They were able to ride a shuttle bus to and from the convention center. The condo bill was \$418; food and miscellaneous expenses totaled \$188.

3 They pre-registered last fall for \$700, the best time for the lowest price.

4 Summating expenses gives a total of \$1,306. They received a \$1,000 World Points cash card to cover most of the cost, resulting in a charge to the budget of \$306.

Also worth noting is that they traveled on the bookend weekends and missed only a week out of the shop. Golf was planned on a nearby resort golf course where a former junior player at our club is the assistant golf professional. Even their fun came cheap. GCI

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Then was the summer of our discontent

Despite the use of respected spray and fertility programs, as well as what should've been efficient topdressing and cultivation programs, some of the best courses and superintendents suffered turf loss last season. Industry consultant Michael Vogt crunches the numbers to find out why.

he 2010 golf season wreaked havoc on greens surfaces from the eastern seaboard all the way to the Rockies in the United States and Canada. Granted, the sustained hot, humid conditions coupled with untimely downpours created an unsustainable environment for bentgrass and Poa annua turf maintained for golf greens. Some of the finest courses and superintendents succumbed to turf loss, with what would be considered bullet-proof spray and fertility programs along with topdressing and cultivation programs that followed the best known practices.

While these significant turf losses received a good deal of press, their actual causes or remedies will in all likelihood not be mentioned in the Wall Street Journal or your hometown newspaper. After the fact, diagnoses were made and the subject of the catastrophic turf failures became a forgotten memory. In my 30-plus years in the golf course maintenance business, I have not witnessed such a largescale disaster with green turf loss.

No one can point to any one physiological or pathological process that devastated green conditions, but these are some of my observations in no particular order:

- · Sustained low mowing heights throughout the summer put extra stress on turf;
- · High organic matter in the top 3 inches of the root-zone held too much moisture;
- · SBI (sterol biosynthesis inhibitors) DMI (demethylation inhibitor) fungicide use;
- · High temperature in the root-zone (>
- · Poor drainage and gas exchange on sandbased greens;
 - · Blue-green algae or cyanobacteria after

some turf thinning;

- · Winter damage turf never recovered;
- · Reduced maintenance budgets;
- · Bacterial wilt;
- · Fairy ring; and
- · Sand and soil thermal properties.

This past summer, I attempted to discover several main causes for greens failure. One commonality was the unusually high temperature in the root-zone of thinning turf. Soil, soil with sand root-zones and some types of sands tended to have lower root-zone temperatures than most straight sand-based greens and fared better having increased rooting and more turgid green leaf tissue. Of course, total turf coverage was the best insulator from the sustained high ambient air temperature. After looking into high-percentage sand greens as opposed to soil greens, I launched a short survey. More severe turf loss was experienced on sand-based root-zone green construction than all others in both occurrence and severity.

My totally unscientific conclusion was that sand-based root-zones retained and transmitted heat more efficiently than the soil-based or soil/sand root-zone mix contributing to a more severe turf loss.

It is difficult to say something general about the soil thermal properties at any location because these are in a constant state of flux from change from angle of sun exposure, organic fraction and, most importantly, the entire water fraction in soil's capillaries. Air is a poor thermal conductor and reduces the effectiveness of the solid and liquid phases in the root-zone to conduct heat. While the solid phase of sand has the highest conductivity, it is the variability of soil moisture that largely



determines its heat retention. As such, the green's root-zone moisture properties and root-zone thermal properties are very closely linked. It comes as no surprise that temperature variations are most extreme at the surface of the root-zone and these variations are transferred to sub-surface layers but at a highly reduced rate as depth increases.

Generally speaking, heat capacity indicates the ability of a substance to store heat energy; the greater its heat capacity, the more heat it can gain (or lose) per unit rise (or fall) in temperature. The heat capacity of dry soil is about 0.20 BTU per pound-per degree Fahrenheit of temperature change, which is only one-fifth the heat capacity of water. Therefore, moist or saturated root-zones have greater heat capacities, typically in the range of 0.23 to 0.25 BTU per pound-per degree Fahrenheit. Light, dry, sandy soils experience greater seasonal temperature swings than most wet soils.

This is because their lower heat capacity

causes their temperature to rise or fall more than wet soils for a given amount of heat energy gained in the spring or lost in the fall. Thus, moisture-laden sandy soil or dry sand root-zones have the ability to conduct greater amounts of heat faster and in high moisture cases longer than soil type root-zones.

Creeping bentgrass root growth ceases at temperatures above 77 F, and most cool season turf plants are subjected to indirect heat the original root-zone, and on a regular basis to dilute organic matter accumulation and a timely cultivation program incorporating heavy topdressing.

WHAT KIND OF SAND?

Calcareous sand – which is composed primarily of calcium carbonate – is predominantly debris from once-living marine organisms. Plants and animals used calcium carbonate

sands are easily obtained and often used for construction of golf course putting greens and other sand-based root zone media. However, their use is in question because of possilbe problems with their long-term stability. It is suspected that calcareous sands may break down, resulting in restricted or plugged pore space. The result could be poor drainage, restricted rooting due to root-zone saturation, and eventually thinning or turf death.





Left: Aerification remains the single most important cultural practice for a functional root-zone. Right: A dead green. High organic matter in upper three inches of root-zone caused turf to decline and die.

stress above 86 F. Bentgrass root death occurs after five days of 90 F temperatures.

AGING GOLF GREENS

In the recently published research study by R.E. Gaussoin, Ph.D., University of Nebraska, aging sand greens is noted for the changes in physical properties. After the 10th year infiltration rate decreased 75 percent. In years one through eight, the decreases were the most significant. As infiltration rates decreased, so did large capillary space (critical for root gas exchange and root-zone temperature change). Also of note, total capillary space increased over the years, meaning that small capillary space was more inclined to hold additional water. The number one cultural practice to keep aging greens functioning properly, according to the research, is a sand topdressing program that closely matched (CaCO³) to form their skeletons and shells. When the organisms died, these pieces became part of the soil and sand.

Non-calcareous sand, in inland continental settings and non-tropical coastal settings, is silicon dioxide (SiO²) usually in the form of quartz, which, because of its chemical inertness and considerable hardness, is the most common mineral sand resistant to weathering. Non-calcareous sands are not saturated with excessive calcium, making it easier to maintain a balanced fertility program.

The absence of excessive calcium leads to slower nitrogen breakdown which helps prevent disease in susceptible turf. Due to lower pH levels, applied nutrients are more available to the plant.

The physical properties of calcareous sand can be defined as any sand that contains at least 1 percent CaCO³ by weight. These

Laboratory experiments have been conducted using small PVC columns to simulate putting green profiles. The columns were filled with sands of varying calcite content.

Dilute acid was added to the columns on five day intervals, with water added on the days in between. The addition of acid simulates some of the reactions that occur following fertilization. Chemical properties of the drainage water were measured, as well as physical and chemical properties of the sand at the conclusion of the experiments. These studies confirmed that calcium carbonate does break down in response to acidification of the soil.

Unfortunately, the study needs to be continued to arrive at a solid conclusion regarding the fate of high-calcium sands. I would be interested in seeing a more complete study of these occurrences in the future.

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