

The Superintendent Triangle

Golf course superintendents face the daunting task of balancing agronomics, course presentation and budget limitations.

BY MARK McKINNEY

Golf course superintendents are charged with producing and maintaining excellent course presentation while balancing agronomics and budget limitations. These three equally important components (as listed below and seen in Figure 1) form what I call the "Superintendent Triangle."

1. Agronomics
2. Presentation (of the golf course)
3. Budget (for golf course maintenance)

Keeping the triangle balanced is key, which means to be successful superintendents must commit to manage all three components.

AGRONOMICS

Superintendents understand that a solid agronomic program is essential for presenting and sustaining a good golf course. In the most basic of terms, if you don't have good turf then you don't have a good golf course. Quality turf conditions are the prerequisite to desired playability and presentation.

At times, it will be necessary to compromise one or more corners of the superintendent triangle to meet short- and long-term goals. For example, important agronomic practices such as aeration and sand topdressing require significant financial inputs while at the same time affecting course presentation. Despite this, compromising the agronomic integrity of the golf course will eventually require substantially more costs later to recover from and correct problems, such as weak greens or wet, thatchy fairways. The lesson learned is that the agronomic point of the superintendent triangle must take precedence to provide quality course presentation and playability over the long run. In the face of pressure from golfers, management, or ownership to forgo such agronomic practices, superintendents must embrace these

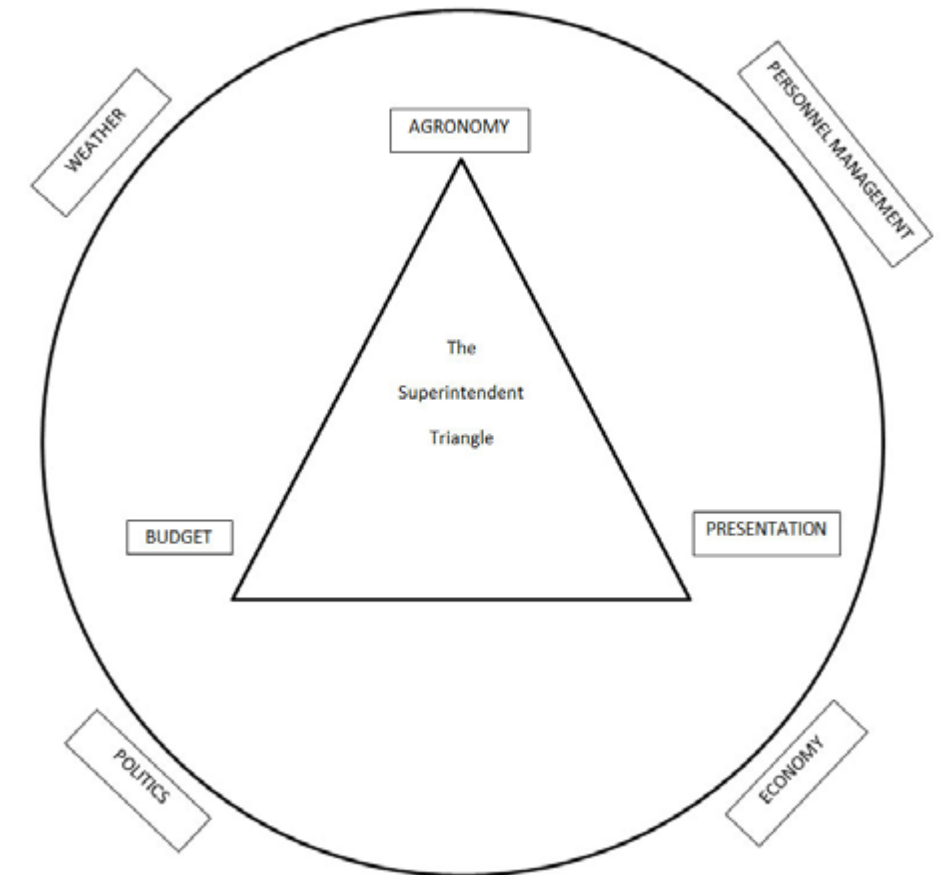


Figure 1. Three corners comprise the superintendent triangle, including agronomics, maintenance budget, and presentation of the golf course. External factors include course politics, the economy, weather, and personnel management.

moments rather than avoid them. It is these times when superintendents gain credibility by demonstrating that they have the best long-term interests of the facility in mind.

PRESENTATION OF THE GOLF COURSE

Superintendents face high expectations from golfers and course officials that represent a wide range of playing preferences. Turf managers must balance short-term strategies and desires with the long-term vision of the course. Presenting an attractive golf course requires attention to details such as clean flagsticks and flags,

shiny ball washers and benches, trimmed cart path edges and bunkers, and, most important, putting surfaces that are smooth, roll true, and feature dense turf coverage. To achieve desired course presentation, realistic maintenance standards should be in place, and these should be supported by an adequate budget.

Successful superintendents know that focusing a disproportionate amount of labor and resources on course presentation alone can lead to failure in one or more components of the triangle. Doing so is also a surefire way risk losing your job. Such a philosophy will negatively affect



Forgoing important cultural practices, such as dethatching on this approach, for an extended time to compensate for course presentation or budget concerns will lead to long-term problems that can be costly to correct.

agronomics and eventually the maintenance budget. If course presentation is the primary focus for an extended period, it is likely that important agronomic practices such as thatch control will suffer and will lead to long-term problems. For example, if the tournament schedule takes precedence and greens are not aerated on a regular basis or thatch reduction practices such as verticutting, brushing, and topdressing are not employed, all three components of the superintendent triangle will eventually suffer. Create an annual agronomic schedule and plan golf tournaments and outings on the calendar accordingly. Too many do it the other way around and agronomics invariably suffer. Obviously, when working with a calendar of scheduled maintenance practices and golf events, there has to be some built-in flexibility because Mother Nature occasionally interferes with the best-laid plans. This approach is very effective, but it does require a lot of communication and coordination with golfers and course officials.

GOLF COURSE MAINTENANCE BUDGET

Given the current economic climate, many facilities cut from the budget

corner of the triangle while expectations for superior course conditions remain high. To meet this challenge, superintendents and the golf industry as a whole need to focus inputs down the middle of the golf course. That is, if 90 percent of the game is played on 50

percent of the property, then 90 percent of labor and resources should be allocated to that 50 percent of the golf course. For example, facilities should focus on the primary playing areas, such as greens, approaches, tees, and fairways, rather than spending valuable resources on areas that have no impact on playability, such as flower beds, or rarely come into play, such as deep roughs and native areas.

Beyond the maintenance budget, some facilities have cut back on capital improvement projects such as bunker sand replacement, leveling tees, tree maintenance, and cart path repair. Although some golf facilities may simply have no other choice, deferring such projects ultimately leads to increased capital expenditures later on. For example, deferring tee leveling for an extended period eventually may lead to a scenario where more than half the tees on the course, and likely the practice tee, will require leveling all at once. By failing to address a growing problem, what could have been as simple as leveling a handful of tees each year suddenly turns into a major capital project that results in a member assessment or additional loans to raise the necessary funds to complete the



Course presentation is an important component of the superintendent triangle, but successful turf practitioners focus on all three corners and don't lose sight of agronomics and budget.



At Del Paso Country Club in Sacramento, Calif., host site for the 2015 U.S. Senior Open Championship, the goal is to focus 90 percent of resources to the 50 percent of the property where the majority of golf is played.

project. It could also lead to golfer dissatisfaction and a drop in membership or fewer rounds played.

A BALANCED TRIANGLE IS KEY

Ideally, golf course owners, managers, and course officials will collaborate and agree on long-range plans that consider all three components of the superintendent triangle. An example includes implementing a resource-reduction plan that may involve reducing acreage of highly maintained turf, converting to turfgrasses that require fewer inputs and are less expensive to maintain, or upgrading to a more efficient and intelligent water delivery system.

Let us use the example of removing highly maintained turf. Many golf facilities in this region were built with over 130 acres of maintained turfgrass throughout the property. Maintaining sound agronomics and presentation throughout such a large property while staying within budget is challenging and unnecessary. Removing turf in out-of-play areas and replacing with either low-input grasses or landscape materials satisfies all three corners of

the triangle with little to no impact on playability.

Other examples include remodeling steep-faced bunkers that are difficult and expensive to maintain or removing bunkers that are not in play. Bunkers that are steep, and especially those that do not include a bunker liner to reduce washouts, are often expensive to maintain due to frequent washouts and the need to replace sand that has become contaminated with silt and clay. Course presentation, playability, and the maintenance budget suffer in such a scenario. When this happens, no one is happy. Bunker improvement projects that address these issues may affect the capital budget in the short term, but course presentation and playability will immediately improve and over time the project will save the facility time and money.

Short-term planning can also help balance the three components of the superintendent triangle. For example, facilities can decrease mowing frequency, reduce fertility and pest control in roughs, rake bunkers less frequently, and use plant growth regulators to lower mowing requirements in primary

playing areas. Such tactics do not often compromise course presentation goals and will help the facility remain within its established budget.

CONCLUSION

A superintendent's responsibilities are diverse and distractions are frequent, but it is important to remain focused on all three pillars of the superintendent triangle when planning both short- and long-term programs. Balancing agronomics, golf course presentation, and the maintenance budget is most important, but challenges such as inclement weather, a poor economy, golf facility politics, and personnel management are common. In the face of such challenges, superintendents must remain committed to the agronomic plans set in place, yet adapt to modifications in the budget and diverse expectations from golfers. Fortunately, the commitment to manage all three corners of the triangle will ultimately yield a balanced product for years to come.

MARK McKINNEY is the golf course superintendent at Del Paso Country Club in Sacramento, Calif.