

Design *on a* Dime

A Central Pennsylvania golf course manager throws out the book on successful golf course operations and writes his own.

BY BILL WALL



The economy has exposed many weak golf operations in our market and a terrible weather year has pushed them to the brink of failure. Some are failing because they were poorly managed, others due to a terrible location, but most often the course is simply no longer a sustainable product.

Too many courses have evolved (or perhaps devolved) into products that cannot possibly compete in a price point market such as ours. Some have built lavish clubhouses they can barely heat, let alone fill. Some publicly funded facilities were built and funded by bond issues,

and today the corresponding debt is not manageable. Still others simply are difficult and expensive to maintain because of their acreage, design or aging infrastructure. And my favorite, those folks who were intent on reinventing the wheel, not realizing it was fine to begin with.

In a golf market such as ours, how can these courses compete where the price point for everyone is so similar and maintenance and management expenses are so high? The bottom line is that a golf course cannot survive unless it can be offered at a competitive price profitably.

So how do you build and manage a golf course in a struggling market like ours? It starts by being able to rationally

separate what we want from what we need and prioritizing what we need to do rather than what we want to do.

My current project typifies that logic. Our goal at Deer Valley Golf Course in Hummelstown, Pa., is to offer our product at a competitive price point. Construction and maintenance costs had to allow us to reach that goal.

The upshot is a competitively priced, well maintained facility and successful business. Here's how we did it.

Continued on page 26

Every effort was made not to disrupt the natural soil profile at Deer Valley to benefit drainage and seeding.

Deer Valley Golf Course

Continued from page 25

Building a winner

Construction of Deer Valley began in the spring of 2003, and we opened in May of 2005. I designed all the features of the course, keeping in mind that everything had to be easy to maintain because I would not have a full-time staff. I also constantly reminded myself that if a project could go from planning and permitting to opening for less than \$2 million, the odds of it profiting for the owners, even in a tight market, increased.

It won't surprise you that the \$10-per-square-foot-plus cost of building USGA or California greens was out of the question. The only option was push-up greens. No material could be hauled out or hauled in. We stripped the topsoil, formed the features with the shaley subsoil, then capped the shale with the topsoil.

Since the percolation rate of the soil is so low, we allowed for sufficient pitch on the surface to accommodate water movement. All the greens were elevated; all free water was diverted from the features with surface swales. Special attention was given to air circulation, morning sun and fill requirements when deciding on a location.

Topdressing with a uniform mason sand began almost immediately. The soil was neither sifted nor sterilized. The greens were seeded to a blend of four bentgrasses and average over 7,000 square feet. The finished product does not have collars nor a mowed approach.

The first priority with the tees was size, both length and width. We have 25 tees averaging just under 4,700 square feet. One large tee was preferred to several small tees when possible to save mow time and for overall ease of maintenance. The tees were seeded to a blend of 10-12 perennial ryegrasses.

We only moved soil in locations that couldn't possibly receive a golf shot. Every effort was made to minimize the disruption to the natural soil profile, realizing it would drain better and the seedlings

would develop faster if left intact. The site had previously been used to graze cattle, so the fairways were sprayed with glyphosate then lightly disked, graded and seeded. Excessive organic material was moved into the rough and shaped into mounds. We seeded the mounds to a blend of Kentucky bluegrasses and 20-percent perennial rye.

Our bunkers are all grass, not sand. I installed a single drain line to remove water, and they are all large enough to be mowed with a triplex or similar machine. We installed an 8-foot continuous asphalt cart path, and the irrigation is a Toro LTC with 800S series heads with no central controller. Fairways and tees are a single row system and the greens are looped with 4-6 heads. Sprinklers are the same throughout, but nozzle sizes vary as needed.

Employees and equipment

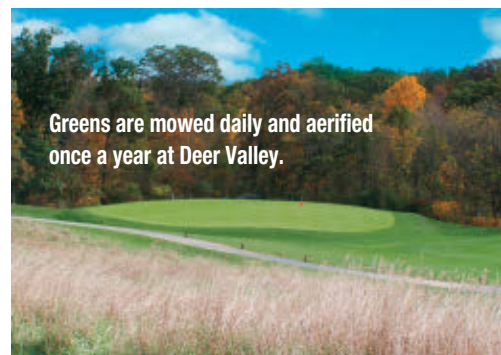
I am the only full-time employee at Deer Valley, wearing both the hats of general manager and superintendent.

I outsource my skilled people such as irrigation tech and mechanic, usually from other golf courses. The remainder of my staff is composed of part-time seasonal employees. The size of the staff can vary from 3 in the winter to 40 in mid-season. Shifts are usually 5 to 6 hours in length, and weekly hours rarely exceed 25.

I make it clear to all that I need them more than they will ever need me and it is beneficial to all that they evolve into a job and shift that suits them best. It took about three years for us to develop into an efficient staff.

Virtually all equipment is purchased used from vendors or other courses. Operators must constantly be made aware of the potential for hydraulic leaks or other problems. Many of my employees use the same machines regularly. Eventually they may take responsibility for daily maintenance of those machines.

Greens and tees are mowed with triplexes; fairways with 5-plex mowers; primary rough with gang mowers; and far rough with a 16-foot, three-deck rotary.



Greens are mowed daily and aerified once a year at Deer Valley.

The cart fleet was purchased used and we expect to get 12 years of service before we begin replacement. When removed from service, carts and equipment are cannibalized for serviceable parts as needed then scrapped.

The pro shop is a barn, circa 1790. It has been refurbished to accommodate the pro shop, a small food and beverage operation and a dining area that seats 50. The second floor is used for cart storage. An attached two-car garage is our maintenance shop. An open dining pavilion was



Bill Wall leans against a bulkhead being built this winter behind No. 9 green at Deer Valley.

mask the brown patch and gray leaf spot issues on the ryegrass and the ryegrass will mask the summer patch on the bluegrass. Greens are sprayed weekly with below-label rates of contact fungicides and fertilizer. Annual nitrogen usage on the greens is between 1 to 2 pounds per 1,000 ft² and we aerify once a year. Maybe most importantly, we have successfully maintained the integrity of the turfgrass stand and kept the annual bluegrass population in check.

I'm proud to be in our sixth full year of operation. We do between 35,000 and 40,000 rounds of golf annually. Our dollar per golfer is near the market average, and expenses typically run 50 percent of revenue. Our play consists of: 33 percent discounted play through our own offers or third party advertisers; 20 percent league play; 10 percent outing; and the remainder off the street. The bulk of our play occurs between April and October. Greens fees and carts account for 73 percent of our revenue, outings 13 percent, food and beverage 10 percent and merchandise 4 percent.

This format won't work for everyone. But for a person or municipality with a suitable site, this may offer a means to build a golf course or a format to operate it. Again, if a project could go from planning and permitting to opening for less than \$2 million, many projects certainly become more plausible.

All of these thoughts and theories could have just bounced around in my head forever if I had not met the owners, Bob and Sally Stern. They had a dream of owning a golf course and the courage to pursue their dream. Both are savvy business people who are adamant in running an effective business.

Today I feel very fortunate to have been the one they trusted to build, manage and maintain their dream. ■

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built for our larger outings, and several detached garages serve as cold storage for equipment.

It's a far cry from some of my previous shops and clubhouses, but the shop is functional, the pro shop efficient and the food service profitable.

Maintaining the dream

My maintenance philosophy is to keep it simple and just grow grass. No PGRs and only contact fungicides. We maintain the bluegrass fairways between .75" and 1", tees at .5" to .75" and greens at .12" to .14". We maintain rigid mowing schedules where greens are mowed daily; tees, fairways and primary rough every other day; and far rough and trim work weekly or as needed.

Fairways are not sprayed with fungicides; tees are sprayed as needed. The genetic diversity of the fairways helps mask many of the disease issues we deal with. For instance, the Kentucky bluegrass will



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