MASTER PLAN: Changing a Course's Complexion

by Geoffrey Cornish President — American Society of Golf Course Architects

As gutta percha gave way to high compression golf balls, and hickory gave way to metal, fiberglass and graphite shafts . . . once challenging golf courses began to succumb to the advance of power golf.

Many courses built in the early 1900s were not designed for the modern game. Long distance clubs and balls gave the golfer the ability to carry lateral water, cut doglegs and perform other feats once deemed impossible.

But fears that technological advances in equipment are ruining the game are unfounded. The golf course superintendents and golf course architects have ways of maintaining the balance of power between the golfer and the course.

Experienced superintendents can make their layouts play 3 to 5 strokes tougher by simple adjustments in the set-up and the grooming of the course. The architect, working in tandem with the superintendent, can achieve even more dramatic results with such common techniques as rerouting of holes, reconstruction of tees and greens, and repositioning of traps and hazards.

Dramatic changes and improvements can be achieved with a wellplanned remodeling and reconstruction program. Every course needs it sooner or later. And in fact, any good golf course architect will admit there's not a course in the world — including those of his own design — which could not be improved with a few simple alterations.

Palmer Maples, the new president of the Golf Course Superintendents Association of America and superintendent at The Standard Club in Atlanta, points out that some of the more obvious problems to watch for are outmoded greens and tees, misplaced bunkers and water hazards, bad routing of holes, unfair shot values, blind greens and either a shortage or overabundance of doglegs, water holes and sand traps. Superintendents may be plagued by maintenance problems such as standing water, hard to mow areas and poor soil condition.

Experienced golf course architects also will notice more subtle flaws, such as green sizes which have no relationship to the length of approach shots, bunkers and traps which are unrelated to the play of the holes, and a monotonous layout that offers little shot variety.

These and other problems justify the expense of golf course remodeling. The investment in a wellplanned remodeling program will be returned many times over in better playing conditions, increased traffic and course revenues, and perhaps more importantly, reduced maintenance.

The key to any remodeling and modernization program is to develop a workable master plan that will remain intact whether the work is to be carried out in a single season, or phases out over a period of several years.

Once the master plan has been developed and approved, it is highly advisable to have the plan entered into the club's by-laws. This eliminates the problem of one greens committee obliterating the plans and work of its predecessors.

Preparation of the master plan incolves several key individuals ..., the greens committee members, the club professional, the superintendent, and the architect. The advice and counsel of the superintendent is especially vital, since he ordinarily has a more intimate knowledge of the course than enyone else.

And if the superintendent is also a golfer, so much the better. Palmer Maples, for example, has a seven handicap, and feels "the play of the game is helpful to the superintendent because it helps him appreciate the needs and problems of his fellow golfers."

Maples is also a firm believer in the need for a master plan. In fact, every task at The Standard Club, from routine daily chores to major course alterations, is accomplished as part of an overall plan. Under Maples' supervision, The Standard Club has carried out several major projects, including the installation



Trees are synonymous with a course's beauty as seen in this plan. One of the easiest improvements, trees are often overlooked as a useful addition to the grounds. (Courtesy National Golf Foundation)

MASTER PLAN:

of an automatic irrigation system and a major course redesign.

Without the benefit of the experience of the greens committee, the club professional and the superintendent, gained through years of playing and maintaining the course, a master plan would be superficial and lack the depth required to produce a truly great layout. Furthermore, without their advice, many good features of the old layout could be compromised or lost.

The role of the golf course architect is to sift ideas brought out by these men, bring in fresh approaches to the problems, and finally to produce a finished plan. Finished plans, working drawings and specifications should be very complete in detail. Sketches of new features and colored renderings of the proposed new course by the architect are important to keep the general membership informed. These are the people who will foot the bill and endure the discomforts of reconstruction. Courtesy also dictates that they be kept informed, while experience shows that the success of the renovation is dependent on their goodwill.

Several preliminary plans and many meetings are required. It takes hard work and diligent effort to produce an inspired master plan. But it's well worth the effort, because this is the blueprint for the future greatness of the course.

The big question in any remodeling project is always: "How much will the project disrupt play and club life?"

The work timetable is an important consideration, since it is often possible to begin work on a limited number of holes after Labor Day and have the course back in play the following spring.

Robert Grant, superintendent at Brae Burn Country Club in West Newton, Mass., points out that a limited remodeling program was carried out at his club four years ago, with very minimal disruption of club life and little or no loss of revenue. Again, sound planning and scheduling was the key.

"We waited until October before starting the work, and closed down only that portion of the course under construction," Grant says. "Since we have 27 holes, members could still play a full 18, even though some holes were temporarily closed. The following spring, the entire course was back in play."

The recommended approach on more extensive projects is to do the work in stages over a period of several years. This was the approach by the Woodland Country Club at Waban, Mass., in completely remodeling and modernizing its 75year-old course. Working from a master plan, the club carried out a complete renovation of the course over a period of about six years.

Club superintendent Norman Mucciaroni explains that two or three holes were remodeled each year, with the work beginning late in the season, usually in October.

"Each spring the members would find two entirely new golf holes," Mucciaroni says. "Most members were so excited about the dramatic changes in the course that they didn't mind the temporary disruption on the course in the fall." Mucciaroni emphasized that the entire remodeling project follwed a master plan that was created at the onset of the project, and was followed precisely.

Another alternative is to close the course for the better part of a year, have all the work completed, and be back in business the following year on a newly-remodeled course. This approach is not frequently used, nor is it recommended, since it means lost use of the course, and severe loss of revenue.

Greens. Although many greens built during the 1920s were flat, the great golf course architects of that era developed the modern green, which is characteristically raised above fairway levels to provide a more interesting approach shot.

Greens with bumps and back slopes are maintenance headaches since they require expansive hand mowing. Since it is difficult to revise part of a green, the best plan is to reconstruct the whole area.

The surface of all greens should allow drainage in more than one direction, but contours and shoulders should be mild enough to avoid scalping by mowers. Drainage problems are not as difficult to correct as they once were. In fact, most greens can be retiled, backfilled, retamped and settled, and the sod replaced in a single day.

Tees. New tees are often immense in size, gently sloping from back to front. Where possible, tees should range between 5,000 and 7,-000 square feet. This enables the superintendent to move his markers and minimize wear and tear, even under extremely heavy playing conditions. Terrace and side slopes should be designed for ease in moving.

Bunkers and traps. The trend in architecture is to design traps with milder convolutions around the edges and a gentle rise from bottom to top to accommodate gang mowers. Modern traps are raised above the fairway level and are clearly visible to approaching players. They drain readily and add to the overall beauty of the course.

Mounds. Modern mounds or hillcocks as contrasted to chocolate-drops of the past have long drawn-out slopes, again to permit maintenance with gang mowers. And in hot weather the turf is less likely to burn out. Mounds have several functions. They provide depth and perception around greens, and help define playing routes along fairways.

Ponds. Adding immeasurably to the interest and beauty of the course, the creation of ponds and often water hazards is very high on the club's list of remodeling priorities. To look their best, ponds must be designed to accommodate mowers that can clip close to the water's edge. Therefore, slopes must be drawn out and extended.

Trees. Planted almost anywhere on a golf course, trees add to a club's beauty. Generally, trees are used for: 1) backdrops at greens, 2) shade at teeing areas, and 3) boundary and roadside markers. Both beauty and safety can be enhanced with judicious tree planting. This is one of the easier areas of improvement, but is frequently forgotten. Courses with trees that have already reached maturity should supplement by adding long-lived trees, small flowering trees and conifers.

The golf course architect will usually be one of the first to recognize the need for course remodeling, and the architect will look to his regular input and advice in the development of the overall plan.

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Will Progress Reports Work for You?

by Paul N. Voykin Superintendent Briarwood Country Club Deerfield, Illinois

I have written monthly reports for many years at my club, and for me they have been a tremendous success. They have provided my committee and board members with information about some of the fundamental steps we have had to take in greenkeeping and administration in order to give the members a topflight course. A copy of the report was also sent to the women's chairman.

This monthly correspondence through progress reports makes my job of golf course maintenance a lot easier to carry out. Here is basically what the progress reports accomplished for me.

First, they are a summary of what is done during the month and catalog weather conditions and maintenance procedures that could be referred to whenever necessary. Second, a copy of this report is given to the pro and manager to keep them informed as to what is being done in my department. This also gives them a schedule of some of the future projects that might correlate with some of their events.

But most important, progress reports are a means of educating greens committee members to what is going on in my department. The committee members, when thus well-informed, then work with me in promoting understanding among other interested club members regarding our operations. This kind of support is of great assistance to a superintendent, especially in the crucial periods of summer.

I set up my progress reports usually under these headings weather, greens, tees, fairways and porridge potpourri. The last is anything that comes into my head that I think might be of special interest to my green committee and I usually try to keep it in a light vein. Sometimes there are additional headings such as rough, traps, landscape or construction.

Let me give you some examples. Let's start with weather. From one of my reports:

> March is the most unpredictable month in the calendar and certainly wins the award for the most capricious month of the year. This March was divided into beautiful weather, cold weather and wet weather, almost in equal parts, which is normal for Chicago.

From a greens report:

The greens have been fertilized with a urea form 38-0-0 nitrogen. Brushes were put on Tuesday, May 23. We are pleased to observe that very little grain is being brushed up by the greensmowers. Each year they get better. Our greens are much tighter now, and considerably less grainy. This can be attributed directly to frequent low mowing, slow feeding, aerifying and heavy topdressing, such as we accomplished last autumn. The greens are cut slightly under 3/16 of an inch right through the season.

From a fairways report:

Fertilized fairways with 16-8-8 approximately 270 pounds per acre. The fertilizer also contained the chemical dieldrin for control of earthworms. Earthworms are wonderful in the garden but not on the lowmowed acres of a golf course where their earth mounds sometimes interfere with play.

From a tees report:

The tees have been fertilized with 18-4-6 fertilizer and are mowed at 1/2 inch. They look superb. Briarwood has the largest tees in the Chicagoland area and their tremendous size makes them especially attractive to the eye and a little scary when the tee markers are in the back. Unlike other courses, our large tees never have that beat-up, worn-out look. Because the tee markers can be moved many places, this advantage justifies their extra cost and maintenance.

From a traps report:

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Progress Reports continued

tractor that has been added to our equipment inventory is one of the best purchases we have ever made. It is such a labor saver and does such a remarkable job in the traps that consideration should be made to get another one this fall (we now have two). That way, two men in half a day after a rain or before an important event or a holiday can get all the traps raked — which is a remarkable feat.

From a porridge potpourri:

(1) If everybody we talk to adamantly informs us that they repair their ball marks, and those of five others besides, who are the golfers who do not? We must have an irre-



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becoming very pock-marked going into the summer. (2) Ladies' guest day was a big success with compliments to the grounds department for using potted geraniums in place of tee markers. (3) The duck hens are nesting quietly by the No. 3 lake, and we have erected a sign that says, "Quiet, Duck Maternity Ward!"

sponsible phantom golfer

somewhere. The greens are

Finally, from a report entitled "house cleaning:"

Our crew has raked and picked up branches and debris on greens, tees and fairways. We then spent a week at the clubhouse, power-broom sweeping, hand sweeping, raking and hauling away debris to a dump. Time was also spent cleaning up paper along Waukegan and Deerfield roads. We carry out this cleaning program each spring and feel that nothing makes a golfer feel better or more impressed than finding tidy clubhouse grounds and a clean golf course when he first comes out in the spring.

I especially recommend this aid to management highly for all young superintendents starting at new jobs and for all superintendents presently having difficulty communicating with their membership. It is not a panacea for success at a country club, but it is a good communication step in the right direction and takes little effort. However, there is no replacement for doing a good job on the course. Hard work comes first. Progress reports come second.

However, I must admit that after 15 years at Briarwood, I do not write progress reports as frequently as I used to. I now usually submit only a spring and fall report to my green chairman and green committee and sometimes also to the board of governors. Here are some excerpts from my most recent spring report:

"Spring play. Every year about this time there comes a short spell when the ground suddenly begins to thaw out and frost starts to come out. The exact time depends on key factors such as depth of frost and the occurrrence of warm temperato page 29





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The Enemy Without

One sunny morning recently, the owner of a well-known golf club in California rose from a restful night's sleep and found someone had taken his fifteenth green. The whole, round green, that was so carefully manicured, had been lifted out of the ground like a piece of pie.

At that same moment, a homeowner in a suburban development near the club, was patting into place the last piece of his new and beautiful lawn. The neighbors came to gawk at its crisp, green "billiard table" surface and many said it looked just like grass on a golf course. In fact, it looked exactly like a putting green, according to some. Harry put the last piece of expensive sod in place with a knowing smile.

He stopped smiling a few days later when detectives found him.

Sound impossible?

It isn't.

Ever since the golf boom in the '60s, when millions of Americans took to the links for the first time, golf club owners have been faced with new headaches. Gone are the days when golf was the game of a few placid Scotsmen in knickers. Today — amazingly enough there are more Americans threeputting, duffing, and swatting golf balls down the fairways than there are soldiers in the American, Russian and Red Chinese armies combined. And, if you put all the country's thriving golf courses into one land mass, it would cover most of the Midwest.

The rapid growth of the industry, however, has brought with it one growing pain or by-product: increased thievery, vandalism, and sophisticated theft at golf clubs. Among the thousands of Americans who have taken up golf, there are inevitably some bad apples.

John R. Hitt, vice president for security at Pinkerton's, Inc., the nation's largest security firm, confirmed the rise of deliberate damage and pilferage. Most common of the mishaps, Hitt said, is the theft of golf clubs and bags, valuables in the locker rooms, heavy equipment from maintenance sheds, like tractors and sprinkler systems, flag pins, ball washers, and shrub trimmers. There are glimmerings of a new type of theft too — the con artist who poses as a member at a private golf club and gets free meals and service by forging members' names on meal chits. There has also been a rising incidence of damage to greens and fairways from teenagers who carom Who does the stealing and vandalizing?

What sort of people go out of their way to plague something as harmless as a golf course?

Some of the known troublemakers are in the following rogue's gallery:

The Kids: teenagers, boys usually in junior high, who have "sleep-



Walking the beat: More and more clubs are hiring security personnel to watch the course after closing. Above, a guard and his dog stroll near the clubhouse.

over them in golf cars or dune buggies, using them like "bumper cars." But the increase which Mr. Hitt reports is fairly common knowledge to every golfer who uses the sheds, greens, and accessories at the course in his community and sees the damage. outs" on golf courses and have fun burying flag pins in the sand traps. They tear up greens and spray-paint golf sheds because "it's a no-no".

Big Hearted Harry: comes to the golf club, looks like every other golfer, over-friendly. But after his

Progress Reports continued

tures and winds. The important thing to understand when this phenomenon occurs is the ground becomes very soggy and boggy, especially on the greens. Any traffic at this thawing time compacts the putting surface, severely damaging the root system and leaving depressions which sometimes will not come out. They exist all through the season covered over by the creeping bentgrass. To prevent this damage from occurring on the course, we will close the course until the greens firm up. This closing (a couple of days) usually happens when the days are balmy and warm and everyone is raring to play. But it is one time that closing the course really helps and one of those rare times that we must do so.

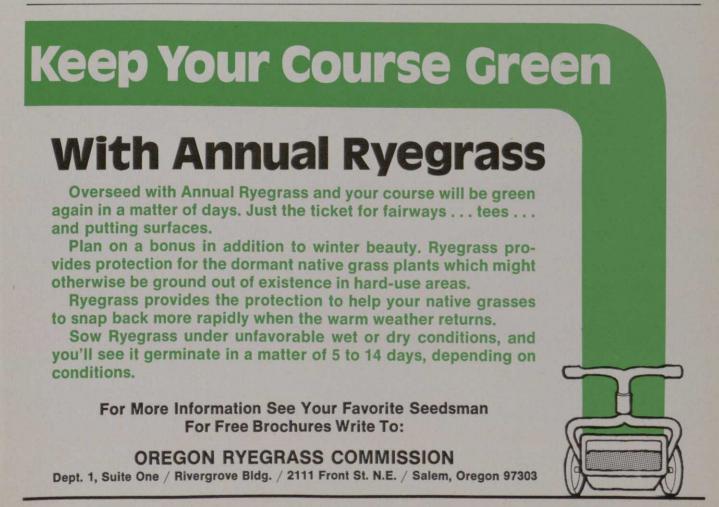
"Tiling. This was another lucky time for our new tiling. As soon as the contractor finished the prescribed tiling it rained and rained and rained. There would have existed turf killing ice or water now in

all the low spots instead of dry ground where the new tiling was put in. As soon as the weather becomes favorable, the contractor (10 percent of his fee was held back) will return to fill in and level the narrow trenches and reset carefully all the new catch basins, after which our crew will seed, fertilize and spread a thin layer of peat moss to shelter the seed until it comes up. The plan to pick up the sod and replace it in the spring did not materialize because the ground was frozen when the winter tiling was done and besides the scraggly turf in these low areas was not worth picking up anyway.

"Tulips-Crocuses. Every third autumn we plant tulips in the circle by the practice tee and also in back of No. 1 tee. Last fall we did some extra planting which I believe will delight our members' eyes. Wherever diseased elms were taken down near the clubhouse area and the stumps chipped down, we planted tulips and crocuses close together. Normally these stump areas are just filled with soil and seeded (which we did again) but since the Kentucky bluegrass will not show anything until late May or so, we thought we would show something a little earlier. Let's hope there was no damage done to the bulbs over the winter."

Progress reports do one other thing. They provide a sort of psychological therapy. By this, I mean that by writing out your feelings, your frustrations and your achievements on paper and sharing them with someone else, you are getting certain job worries off your chest by explaining what you are doing. As I mentioned before, this type of thing can be especially helpful to the younger superintendent just starting out. By sharing your problems with others, you are getting things out of your system. This is healthy.

In a progress report, relay your anticipated problems and headaches, and also your achievements. And add a little humor now and then. Nobody wants to read a ponderous, doomsday report. And by all means, do not take yourself too seriously all the time in the report.



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