The money for the pro tours and the U.S. Open Championship, in defiance of gravity, trickles *up* from amateur golfers.

It's not at all like the big-money spectator sports. Imagine, if you will, that big-money football was abolished. Assume that the pro leagues are outlawed and that the colleges and universities are made to treat football as a game, rather than as a business.

It's quite possible, even likely, that football would become extinct within a decade. Soccer might replace football as the primary sport in elementary and high schools — without the commercial spectacle and example of big-money football.

But imagine the same situation in golf. Suppose the existing pro tours dissolved. Would any of you give up golf? Would your members stop playing golf? Of course not.

Within five years, new pro tours would sprout, seeded by amateurs. Within 10 years they'd be thriving, and they'd be building stadium golf courses, and proclaiming them the wave of the future all over again.

The wave of the future in architecture? I sort of wish it was more like some of the seepage of the past.

I am hopelessly nostalgic when it comes to golf course architecture whose Golden Age, as I see it, took place in a period that began at about the time of World War I and ended, with a thud, at the onset of the Great Depression.

As evidence, look at the list of America's 100 Greatest Courses compiled and revised every other year by the magazine *Golf Digest*.

Of the top 10 in the last revision, not one of the courses honored is less than 48 years old.

Of the top 20, only two were built after 1940.

Of the top 50, I believe only 15 were built after World War II.

Something's wrong here, of course. It may be that what is wrong are the perceptions of the *Golf Digest* selectors, of whom I happen to be one, but I think not. If anything, I think the selectors and editors lean over backwards to try to give modern courses a break.

So this, at least as I see it, is not the golden age of golf course architecture.

It is, however, the golden age of golf course maintenance. Anyone who doesn't see that courses are better cared for than they were 10, 25, 50 years ago, simply isn't paying attention.

## Some Thoughts on Target-Area Mowing and Maintenance Costs

by JAMES A. WYLLIE, President, GCSAA, and CGCS, Bayview Country Club, Ontario, Canada

WOULD LIKE to preface my views about golf courses of the future by telling of my recent experiences in recontouring the fairways at Bayview Country Club as we converted fairways from *Poa* to bentgrass. I would also like to comment on target-area mowing, which we have implemented on a few of our fairways. Finally, I would like to share a few of my thoughts on the stadium-type architecture that is being discussed today.

While preparing for the fairway renovation program at Bayview, I came upon an article by Jack Snyder, the President of the American Society of Golf Course Architects.

On existing golf courses, indiscriminate change in mowing patterns without taking into account the aesthetic and strategic factors would be risky at best. It must be done with a golf course architect, the club professional, and with the golf superintendent — as a team.

It was after reading this article that we at Bayview hired Robert Moote, of Toronto, a golf course architect. Bob visited our club often and presented a plan of how the finished product would look. We all agreed it was acceptable.

At this time I became involved with target-area mowing. We had decided to renovate our fairways by removing all *Poa annua* and converting to bent-grass. This would require us to kill off all existing grasses and then overseed with a 50/50 mixture of Penncross and Penneagle bent.

Two days before the spraying was to take place, the team staked out the fairways for the new contours. The stakes were set at approximately 25-foot intervals, and I personally sprayed the herbicide as the new contours were established (Figure 1, June, 1982).

As to specifics, the fairways were sprayed with two liters per acre of the herbicide Roundup. It was applied using a Broyhill sprayer mounted on a

Figure 1.



Cushman Truckster. We mixed four liters in 100 gallons of water. The Cushman was driven in first gear, high range at 1,800 rpm. After a five- to seven-day waiting period, we cut in the bentgrass seed with a Rogers seeder, going in two directions and applying 20 pounds per acre in both directions. Figures 2 and 3, showing the progressive results, were taken in August and October, 1982, respectively.

As to the maintenance of the fairways, we plan to mow with triplex units in 1983. This will allow for the removal of the clippings from fairways. Hopefully, this will, along with good bentgrass growing practices, keep out the *Poa*.

The question has often been raised, "Are most private clubs really interested in holding costs down, or are they more interested in playability, enjoyment, and added beauty to their golf course?"

When I made the renovation presentation to my club, one of the selling points was that we would eventually reduce costs in maintaining fairways. Any worthy superintendent is constantly aware of rising costs required to maintain a golf course today, but with the competition that many of our clubs have become involved in, the cost of some of the niceties and the costs to provide them are sometimes thrown to the wind. Yes, I believe most clubs are very aware of the costs of maintenance, but their respective wants and demands cause the costs to rise. In answer to the above question then, I honestly think that most clubs would like to keep costs down, but their personal demands make it literally impossible!

IN REGARD to triplex mowing of fairways, I believe the increased costs are offset by the decrease in fertilizer and irrigation requirements resulting from bentgrass fairways. These two cost factors roughly negate each other, leaving us with a net gain shown by the improved playing conditions we have provided.

Ken Wright, the superintendent at the National Club, in Ontario, has been target mowing his fairways for the past year. Ken feels the capital cost of three triplex mowers against one 7-gang tractor unit is almost equal. He spent 770 manhours cutting in 1981 with seven units and spent 1,450 hours with triplex units in 1982. This approximately doubled the labor cost. In addition, he feels his maintenance on the triplex equipment was considerably higher.



Figure 2.



Figure 3.

The fuel costs were about the same in all cases. Therefore, Ken feels it is costing him approximately \$7,800 extra to cut fairways with triplex units. His water and fertilizer costs will not be known until he has results from two full years of this operation.

Regarding the natural look, or British look, I personally feel it is fantastic, but I do not believe it fits into most clubs. For example, a high percentage of golf courses today are built in conjunction with real estate projects where back yards are adjacent to fairways. How do you explain to your neighbor that the foot-long grass beside his manicured

lawn is "the natural look"? They won't buy it, and most of them are members at these clubs. The natural look is also a problem for the average golfer. He does not stand a chance once his ball leaves the fairway. This may be fine for tournament or resort-type operations, but definitely is not acceptable at most private or pay-as-you-play clubs.

As another example, take sand bunkers that are supposed to have a natural look (Figure 4). We all know the only natural thing that will happen here is that when the rains wash the sand down it will be shoveled back naturally by hand labor. Ample artificial drainage

must also be provided or this bunker will be a pond every time it rains.

Probably the best natural, modern golf course that takes the spectator into consideration is The Glen Abbey, in Oakville, Ontario. Even here, where the natural berms have been used, not enough care was taken to prevent the surface runoff from ending up on the fairways. The Tournament Players Club, in Jacksonville, Florida, is also a fine golf course, but it does not have that natural look, i.e., having been there since time began. It is a labyrinth of drainage pipes from the so-called natural hazards. A true natural look uses the terrain as it was naturally created.

I would like to quote golf architect Robert Moote.

What do we actually mean by the natural look? If we mean only allowing the existing or important vegetation to return to its natural state, then I feel the degree of naturalization is dependent on the type of course, i.e., subdivision, country club, or tournament course. On the other hand, I first think of the natural look as having the topography dictate the green, tee, landing, and water areas. This has been done by architects since the game began, whether consciously or subconsciously. Therefore, I do not think the natural look is a fad. Even on plateau sites, water and trees dictate design. I admit, on occasion, sites have been leveled in subdivision development. Nevertheless, I think we are reverting to the old style of architecture.

I always make use of exciting topography. With contour mowing, we are strategically refining the variable-sized landing areas and with small target greens and shorter-length courses, we are placing more emphasis on finesse and accurate shot-making. This is important with the rising cost of construction and, even if the cost of maintenance is not a factor, efficiency is. One final point to ponder in the natural look; do we, the golf course architects, want to be stereotyped? I think not.

All of the problems — the maze of drainage pipes, the natural bunkers, the lack of surface drainage and the vast amount of hand work — fall on the shoulders of the golf course superintendent. If your club wants an unnatural natural look, then be prepared to pay for it in higher maintenance costs. On the other hand, the true natural golf course, built on a native links terrain, can be beautiful and, at the same time, quite economical to maintain.

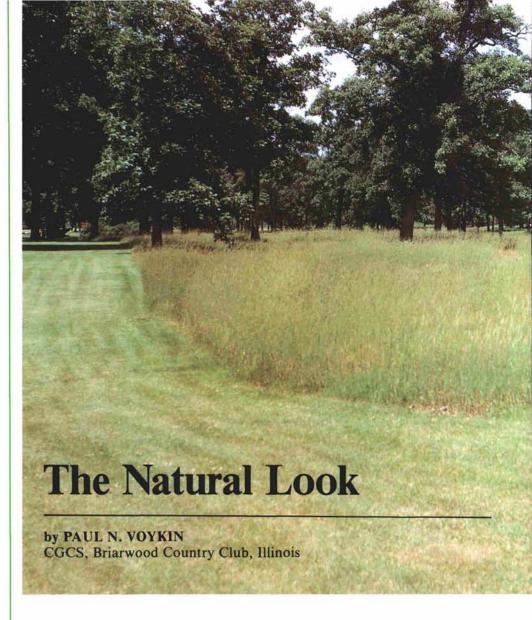


Figure 4.

