

GOLF COURSE REBUILDING AND REMODELING— DESIGN, FINANCING AND TIME FACTORS TO CONSIDER

The USGA Green Section conducted its third annual Educational Program at the Biltmore Hotel in New York on January 30, 1959. The Chairman was Mr. William C. Chapin, Chairman of the USGA Green Section Committee. The Vice-Chairman was Mr. Edwin Hoyt, Northeastern District Chairman of the USGA Green Section Committee.

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The moderators were, Mr. William H. Bengeyfield, Western Director of the USGA Green Section and Mr. Charles K. Hallowell, Mid-Atlantic Director of the USGA Green Section. Also participating were, Mr. James M. Latham, Jr., Southeastern Agronomist, and Mr. James L. Holmes, Mid-Western Agronomist of the USGA Green Section.

The morning session was devoted to the topic, Basic Agronomic Considerations in Rebuilding. The talks delivered by the principal speakers were summarized in the previous issue.

The afternoon session was devoted to the topic, Factors Pertaining to Design, Financing and Timeliness in the Rebuilding Operation. The following summarizes the talks delivered by the principal speakers.

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Design With Respect To Play

BY ROBERT TRENT JONES

Golf Course Architect, New York, N. Y.

Every golfer cherishes a fondness for certain courses. Even though he may not stop to analyze why, he recognizes that he has derived a special enjoyment from playing those layouts. It is the business of the golf course architect to discover and to utilize the features that make a course so superior that any golfer playing it instinctly feels the glow of approval and pleasurable excitement.

Many courses are designed for penal value alone. In his effort to construct an exacting course the designer completely ignores the average golfer who pays the bills. The prime purpose of any golf course should be to give enjoyment to all golfers, regardless of their playing ability.

As far as possible, there should be

problems for each class of golfer to solve according to his mechanical skill and mental keenness. These problems should be interesting; there should always be something for each golfer to do, and that something should lie within the realm of his particular repertoire. There is nothing quite so disheartening to the high-handicap golfer as to see before him a problem that is beyond his game and no alternate route open for him to follow humbly. In a situation like this, he can do nothing but play short or head for trouble. Since his game is short enough as it is, to necessitate his playing deliberately short is sufficient ground for labeling inept the strategy design of the architect for that course.

Whenever there is a carry, there must

be a way around the hazard for those unwilling to take the risk, and there must be a just reward for those taking the heroic route. Without the alternate route, heroic carries are unfair. Without the reward, heroic carries are meaningless.

The ideal course, as earlier stated, should demand alertness of mind as well as playing skill, for otherwise the players will not become absorbed in meeting the series of tests and challenges a golf course should offer.

There are two ways of punishing the tee shots, for instance. One is to exact a penalty for a missed tee shot by involving the golfer in immediate trouble—a bunker or some other form of hazard. The other way is to exact a penalty at the green because the golfer, in playing his drive, has not taken into consideration the ideal way to play to the pin.

The reward for the golfer who has thought the hole out and placed his tee shot intelligently is an excellent angle for approaching the green. The contours in the green area always favor him. From another position he would have had to take into account playing his shot past guarding bunkers and avoiding mounds that might have deflected his ball.

A course laid out with strategic soundness of this order is bound to be interesting. No matter how many times it is played, it is always a new and refreshing challenge.

St. Andrews in Scotland is such a course; its longevity as a Championship course layout fathered on its seemingly eternal verity of its strategy. The longer a person plays St. Andrews, the better he comes to understand the common sense behind its charm.

Ted Blackwell, for example, had played the Old Course for 35 years when he suddenly came to see that the 16th hole, which he had always considered unfair, was, in truth, as strategically sound as the holes he adored. Blackwell's grudge against the 16th had been that the fairway traps were so positioned that by avoiding them a golfer automatically placed himself in such a position that he had the poorest opening to the green.

A long hitter, he had habitually played his tee shot full and well to the left of the key trap called the "Principal's Nose," until he discovered two facts in rapid succession. First, there was a

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subtle pocket, no more than 10 yards long, at the left-center of the fairway. Secondly, after a drive that was placed in this pocket a golfer studying the contours of the slippery green in the distance could discern from that angle a very, very subtle but nontheless real channel leading to the center of the green.

How he could have played the course for so many years with such apparent blindness was something that mystified Blackwell, but he thought that he had at length found the almost hidden key to the 16th. His performances on that hole from that day on appeared to bear out this belief, for once he had placed his drive in that all but invisible pocket, Blackwell almost never failed to play his approach shot dead to the pin through that all but invisible channel.

The modern theory in golf course architecture is to create a balanced hole for various classes of golfers. In the past, a majority of players, who may have been termed average golfers, were punished far out of proportion to their playing skill. Traps were profusely placed in all areas of the fairway so as to catch a shot only slightly in error. Since the technique of the average golfer's swing is subject to flaw more often than the good or expert golfers', he was constantly in trouble. As a result, he was denied many of the satisfactions of golf, and the game lost its appeal for him.

An analysis of the situation disclosed that, as far as the crack golfer was concerned, traps under 200 yards usually offered little or no concern, whereas those same traps were always punishing the average golfer. It, therefore, was judicious to move these traps so as to make the play less rigorous for the average golfer and still not weaken the character of the course for the expert. It was found that in the green area a master trap could be so correlated with the putting area that the hole could be tightened or eased to the extent that the pin was placed behind the trap.

In the old penal type of architecture, where the greens were flat and surrounded by a jumble of clam shell traps, the golfer had no choice other than try to play the perfect approach required to reach the green. Since the shot demanded was often not in the average golfer's repertoire, he realized that he was doomed before he started.

With diagonal trapping, wide green tongues and alternate routes to the green, the average golfer can play a shot which he feels is within his range. He must think before he shoots. He must vary the manner in which he plays a hole on any particular day according to how well he is hitting the ball or, in the case of tournament play, according to the circumstances of the match.

Design With Respect To Maintenance Practices

BY WILLIAM F. GORDON
Golf Course Architect, Doylestown, Pa.

For the past few years there has been a great movement toward lower maintenance costs. Some of the items that are causing the additional costs on our courses today are steep slopes and banks around greens, tees and bunkers, extreme undulations on greens, greens too large or too small, poor soil mixtures on greens, improper surface and subdrainage, too little or too much teeing area, improper construction, faulty seed and turf mixtures, and bunkers and drainage.

If it is a new course and you have secured a reliable architect, you can be assured that he is aware of all these and many other conditions not mentioned, and that he will furnish his client with complete plans and specifications which will start them off on the right track.

Topdressing and Limestone

Dr. J. A. DeFrance, of the University of Rhode Island, is an advocate of topdressing and the use of limestone in the prevention of thatch buildup. Dr. DeFrance says: "A little limestone is needed each year, even when pH reading is good. Dolomitic limestone is preferred in magnesium deficient soils, also compost (topdressing) each year to help control thatch."

Regarding steep slopes and banks, all outside slopes on greens, tees and bunkers should not be steeper than 4:1 ratio and in many instances you can increase this to 6:1 ratio. This means that your fairway or rough units can then mow these areas with comparative ease.

Extreme undulations on greens can and do cause much trouble in green maintenance. It is impossible to get sufficient cup placement area on greens with extreme contours unless the size of the green is increased considerably, increasing the cost of chemicals, mowing and fertilizing.

All greens should be designed of sufficient size to receive the shot that should be played to them. The size should vary from 4,500 square feet to 7,000 square feet. This should be the target for the player to shoot at and should include a collar of not more than three feet for turning of mowers. The putting green bunkers should tie directly into this area and leave no area for fairway mowers, heavy equipment, electric, gas, or hand driven caddy carts. Rules should be set up controlling use of both power and hand drawn carts, so there will be a minimum of damage. If a study of your greens is made with this in mind you will show a great saving in your maintenance costs.

Poor soil mixtures on greens are a cause of costly maintenance. On a new course be sure of your mixture and go