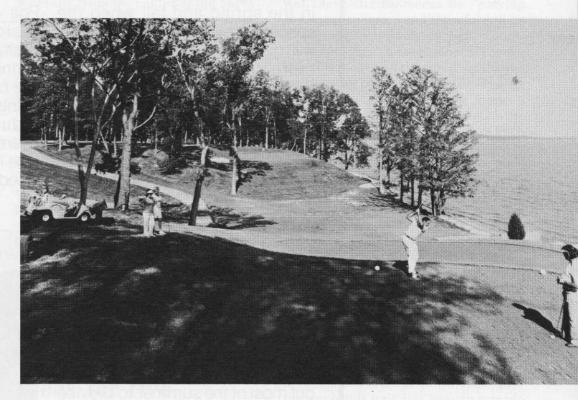
# Tees: misplaced, misdirected, misused, and abused

by Joseph S. Finger, P.E.



"Too many design tees so that the front is not facing down the fairway. It is amazing how many golfers will tee up in the wrong direction."

fore, the differences in their playing abilities could be judged accurately.

As the game of golf progressed, the numbers of players increased and players demanded progressively better teeing areas. Tees therefore were expanded to much larger areas so that the grass could recover in wellused areas, and so that different classes of golfers could tee up at different positions. Tees today are sometimes almost as long as par-three holes used to be. And herein lies one of the major abuses.

#### The handicap system

The handicap system for golf is intended to equalize players of various abilities so that the match or contest will be more interesting. In no other sport in this country does the handicap system play such an important part in making the game more even for players of widely different abilities.

A strong tennis player might hate to get on the court with his wife because she can hardly return the ball; but in the game of golf, a man can have a fairly interesting golf match with his wife because the contest is evened out by the handicap system. Similarly, players at different clubs can engage in contests with each other because their handicaps permit adjustments due to their differences in abilities as well as differences in their courses. But this assumes that the handicaps are all based on a fair and simi-

(This is the first half of a two-part series. The second half, on the subject of the physical abuse and maintenance of tees, will appear in GOLF BUSINESS next month.)

No other part of the golf course is used so much, misused so frequently, and discussed so infrequently as the teeing area.

A golfer might play every hole down the rough, never hit a fairway, never hit a sand trap, and theoretically hole out eighteen shots from off the green, thereby missing all the expensive parts of the course. But according to the rules of golf. he must start the next hole from the teeing area. Yet tees are misunderstood, abused, misused, and neglected to the point where "something should be done about it."

The condition of the grass on the tees is only one slight part of the abuse which is given to teeing ground. Abuse or misuse of tees ranges from misplacement of tees to the handicapping system for all golfers. We will take a look at these one by one.

In the old days, we had a tee box, consisting of either a cleared area of ground or, later on, an elevated "box" from which all play began. Often the box was not more than 2 by 3 yards in size; and at the side was the old sand box in which sufficient moist bank sand was maintained to allow golfers to mold their individual tees, long before the wooden tee was invented. This practice might still have some real merit inasmuch as it did eventually leave a cover of fairly good soil on each tee. It also meant that all players started at the same spot; and, there-

Joseph S. Finger is not only a professional engineer, but a golf course architect and planner as well. He has been in the business for 20 years.



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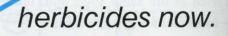
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lar system. Unfortunately, they are not.

The handicap system is supposed to adjust the contest between players of various abilities when their handicaps have been determined *playing the same course*. This is an oversimplification because obviously everyone cannot play the same course. In fact, the handicap, when it is properly determined, will apply to any course, since the handicap is supposed to be an adjusted stroke difference between the player's game and the *rated* par for a given course.

Assume that all players should be "playing the same course" for handicap purposes. Players cannot be playing the same course if one player is consistently teeing up from 50 to 100 vards closer to the pin than another player. It is conceivable that they could turn in identical scores, and thereby one player not be entitled to a handicap over the other player. Yet their abilities might be vastly different at the same distance. It is only when players begin at the same teeing point that differences in their abilities can be measured and quantified. by the handicap system. But very few courses that I know of require that all players tee off at the same distance on each hole. Some courses have as many as five different teeing areas for five different classes of golfers; and the distance from the "old men's tee" to the "championship tee" might be as much as 100 yards. A 20- to 30-vard difference between championship tees and "regular tees" is common because of another desirable point, which will be discussed later.

The problems become obvious if vou consider a club whose course has tees which are only 20 yards in length and the handicaps of all golfers are based on a spread of no more than 10 or 15 yards in teeing area. Compare this with another club which has tremendously long tees and high-handicap players may be playing from a distance some 50 or 60 yards closer to the hole than the regular tees. If the two clubs were to compete, it is possible that the high-handicap players from the club with the long tees might suffer a severe disadvantage. Their tees were longer and the distances to the holes were greatly reduced, permitting their scores to be lower and their handicaps to be lower. When they get

on a longer golf course with shorter tees, they suffer a disadvantage because the members of that course might have more realistic handicaps with respect to the rating of the course, since all members were playing from more nearly the same point. Remember that the rating distance for the course is based on a fixed point, generally from the center of the tee to the center of the green, not from "nearly the front of the tee" to the green.

Those clubs which usually set the tee markers considerably forward of the rated distance for each hole, particularly on busy days when they are trying to get more players through or let the players feel better by scoring lower, actually do their members a disservice if there are going to be any inter-club tournaments. As long as players are playing only their own club, it probably makes little difference. But if there is inter-club play, or a "member-guest" tournament, those

# "Some courses have as many as five different teeing areas for five different classes of golfers."

members who "had it easy" by playing the front part of the tees on their own course will have lower *relative* handicaps if the other club is handicapping on a proper basis from the rated distance, and thereby will play at a disadvantage.

For other reasons it may be desirable to separate golfers of varying abilities instead of having everyone playing from the same teeing ground.

The hazards on the golf course are usually designed and constructed to create a penal situation for the errant golfer who plays well. That hazard should not normally be reached by the average golfer. If both play the same tees, the average golfer would then be playing a golf course much longer than he cares to play; and his scores would always be high. If the average golfer's teeing area is moved forward sufficiently, the course might be shortened; but the hazards would then come into play for this type of golfer. The correct relationship between placement of hazards for the average golfer and a placement of hazards for championship golfers will be discussed later; but it is obvious that the two classes of players would not under these circumstances be "playing the same course," and therefore their handicaps might be incorrect.

What's the answer? That's a tough one. Perhaps courses could set the tee markers up so that everyone plays the same teeing ground (plus or minus 5 yards from the rated yardage of the hole) on about 20 different days each year. With a little luck, each golfer would get in about a dozen rounds "playing the same course." His handicap would have to be based on these dozen rounds instead of perhaps two or three times that number if he turns in a card every time he plays. But the handicap might be more meaningful.

#### **Tee-to-hazard distances**

Another abuse of tees lies with the designer who does not seem to relate the abilities of various classes of golfers in the placement of hazards. Generally when I design a course, I feel that the average golfer who plays on weekends only has enough trouble getting around the course without getting into hazards on his tee shots; and I try to design these hazards starting no less than 215-225 yards off the middle tees. At this distance, most golfers will never reach the hazard. But by the same token, I feel that the long hitter is my "lawful prey;" and I want these hazards to catch his shot if he strays. But to do so, the hazard must be in the 235-280 yard range. This means that under a given set of conditions, the championship tees must be kept from 20 to 35 yards behind the regular tees. If the distance between the championship tees and the regular tees is greater than 40 yards or so, either the low-handicap player will not reach the hazard or the higher-handicap player will be able to reach the hazard. Both situations are undesirable. If the spread between the regular tees and the championship tees is less than 20 yards, chances are the low-handicap golfer will drive past the hazard (assuming it is a lateral one or a trap or trees), or the

course might be too difficult for the higher handicap player.

#### Tee in relation to pin position

On many courses, the holes are not so long or so subtle that a relatively unfair situation can develop if the pin is in a particular location on a green and the tee markers are not adjusted accordingly. In most courses any teeing area is okay for any pin position. But not so on many championship, or longer, courses — particularly where doglegs are involved.

There are situations where the pin position can be so tough (such as tucked behind a yawning, deep trap) that it is almost unfair to ask a golfer to try to hit a 215-225-yard shot over the trap from his fairway lie. Sometimes the shot required and the shape and slope of the green is such that the only way that the player has a chance to go for the flag is to be able to use a medium iron. Under these conditions, the tee marker should be moved to such a position on the tee that a fine drive (245-275 yards for championship players) will permit the use of the medium iron on the approach shot. On this same hole, a less protected pin position on the green might permit the tee markers to be moved back so that even a well-placed drive could require a long iron or three wood shot at the pin.

A few years ago at one of my toughest courses, an invitation tournament was being held in which 27 of the touring pros participated. On several of the holes, the tournament officials overlooked coordinating the tee markers with the pin positions, and less than 30 percent of the pros parred these holes. You can imagine the bellyaching. I advised the officials that I thought the pin positions should be coordinated with the tee markers, and the next morning they permitted me to set both. I shortened the course by 250 yards, and the pros still didn't "chop it up," but there were no more complaints of "unfair."

Similarly, when I used to play in the Champions Cup Matches at the Champions Golf Club in Houston, which I regard as one of the finest amateur tournaments in the country, Demaret and Burke used to love to put the tee markers back so far that one wag-quipped "we are hitting the bushes on our backswings." With the long par fours at Champions, and with some of the doglegs tightly guarded by trees, it was virtually impossible for even the best amateurs to go for a flag which was tucked to the extreme dogleg side of the hole or just over a deep trap. We were forced to play tee shots away from the dogleg, leaving tremendously long shots (often over hazards) into the green. Naturally, very few birdies were made and pars were tough to come by.

#### Should tees be long?

Another abuse of tees stems from the belief that the long tees are built by the architect so that the course can be made constantly longer and tougher as each round of the tournament is played. Some people feel that players should start with the tee markers up front and move them back 10 yards each day of the tournament. This shows a real lack of understanding of the game of golf and particularly the design of golf courses. I think most good golf course architects like to see their courses played at approxi-

Figure 1: If the tee markers are placed back in position B, the pin setting should be in position B also. Placing the pin on the green in position A would require a golfer hitting a fine tee shot to try to carry a trap at some 200 yards from his tee shot is sharply downhill where the player can take advantage of the drop in elevation to use a shorter club. With a tee marker in position A, the golfer has a chance to gamble on a short carrying the lake, and if he makes it he has a shorter shot into a pin setting at A. The golfer who doesn't care to gamble will be faced with a somewhat longer shot into the green. In the latter case the pin setting at A is tough but not unfair.

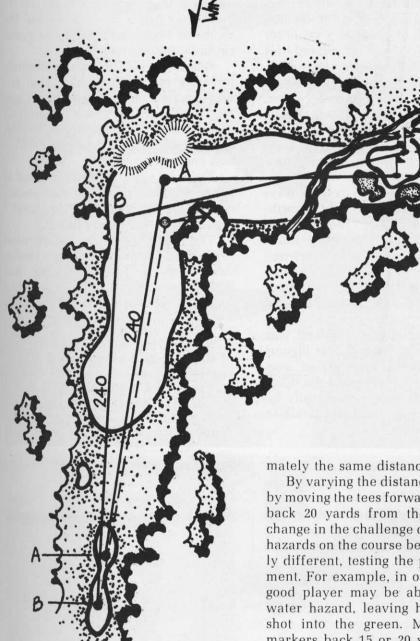


Figure 2: Assuming the tee markers are at position B and a strong wind is in the face of the golfer. Very few long hitters can hit the ball far enough to be able to shoot at the flag, much less at the green, if the flag is in position A. The trees at the dogleg would tend to force the golfer to shoot too far left unless he can hit a tremendous fade or slice. Without a strong wind, the tee marker at B might be more justifiable. With a strong wind, placing the tee marker at position A would permit golfers to hit far enough into the dogleg to have a shot at the pin and not be blocked out be the trees on the inside corner of the dogleg, marked by position X.

mately the same distance every day.

By varying the distance on the hole by moving the tees forward 20 yards or back 20 vards from the center, the change in the challenge due to various hazards on the course becomes entirely different, testing the player's judgment. For example, in one position, a good player may be able to clear a water hazard, leaving him a shorter shot into the green. Move the tee markers back 15 or 20 yards, and he might find himself guessing as to whether he can clear the hazard or whether he has to play around it; and this type of judgment or decision is what makes the game interesting for both pro and amateur alike. In my opinion, a well-set-up golf course will have some tees forward and some tees in the middle and some tees back for each round; but in any case, the tee positions must be coordinated with the pin positions.

Long tees are necessary to allow for varying winds. In my opinion, a good golf course superintendent will watch the weather reports each day and try to determine the direction and

strength of the winds predicted for the following day. He should then set his tee markers accordingly. How often have you played a course in which the tee markers have been moved toward the back of the tee (for no apparent reason) only to find that you have a 15knot wind in your face? On the next hole, the reverse might be true.

Long tees are designed to allow flexibility of the hole with respect to the hazards, to the wind, and to the wetness of the course, not just for the purpose of making the hole play tough or play easy for various handicap golfers. But often this is ignored.

#### **Directioning tees**

Too many amateurs (and a few architects who shouldn't be) make mistakes designing tees, leaving them so that the front tees are not facing down the fairway. Although this normally does not bother the low-handicap golfer, it is amazing how many of the highhandicap golfers will tee up facing in the wrong direction. This stems from the fact that many golfers will unconsciously line up with the right hand edge of the tee (if they are right handed), or perpendicular to the front line of the tee. And if these lines are not correctly placed with regard to the center line of the hole, the player will often line up incorrectly and hit his shot to one side or the other. Therefore, it is very important that the front half or front third of the tees be so built that the players will be given a chance to line up properly. The back half of the tee, usually accommodating the lower-handicap player, can be in any direction as this type of player should be able to line himself up properly regardless of circumstances.

Jimmy Demaret once told me the answer: "Make all the tees round then they are all facing correctly.'

On the other hand, nothing is more monotonous than a long, rectangular tee, especially when it exists on every hole. Tees should be made to blend into the landscape, particularly in rolling or hilly areas. Even in flat areas, a good golf course architect can make irregular tees which are interesting to the eye and still easy to maintain. The shrubbery or trees accompanying the teeing area also must be taken into consideration or must be planted for the best effect. 

#### FOR MORE FOOD STORAGE SPACE

# Country club installs inside cooler outside

When the Plainfield Country Club's clubhouse was rebuilt following a fire in 1920, the contractors installed in the kitchen the most modern walk-in coolers money could buy. They used every available inch of space to provide for refrigerated food storage not only for 1920, but for the decades ahead.

As the years passed, the walk-ins were modified and improved. Newer, more efficient insulating materials were added as they became available. The transition was made from ice to electric cooling to up-to-date refrigeration systems.

"Those boxes served us well," says Louis R. Liguori, manager of the northern New Jersey club. "They paid for themselves, probably many times over. But they were also long overdue for replacement, particularly in view of the rapid inflation in food, labor, and energy costs in the past several years."

The replacement problem was compounded by the fact that Liguori wanted increased refrigerated storage space. "No kitchen can be operated efficiently and economically today without an adequate walk-in freezer," he states.

#### Three in place of two

Located about 30 miles west of Manhattan, Plainfield has a membership of 570. Club facilities include an 18hole golf course, six tennis courts, two squash courts, a swimming pool, and driving range.

Except on Mondays, when it is closed, the 86-year-old club serves 80 to 100 lunches a day and approximately the same number of dinners. The menu changes daily.

"In spite of the fact our old walkins had been modified, they were expensive to operate," Liguori explains. "We wanted the most efficient insulation we could get since efficient insulation means lower electrical bills."

Liguori, who has been club manager for 6 years, continues, "The lack of adequate freezer space prevented us from taking advantage of bulk purchasing of many items and of good 'spot buys' that appear every now and then. The lack also prevented us from obtaining maximum utilization of our seven-person kitchen workforce."

The existing walk-ins were replaced with modern prefabs assembled from panels manufactured of 4 inches of high-density urethane foamed-in-place between sheets of metal. Added capacity was gained by erecting a third walk-in *outside* the clubhouse kitchen with access via a portal cut in an existing wall.

One cooler is used almost exclusively for aging meat. "There have been too many changes in meat grading to suit me," Liguori claims. "I don't have confidence in today's grading system. I prefer to play it safe and age the meat to tenderness under our control."

The meat aging cooler is operated at 32° F. "The members and their guests notice the difference in the meat," Liguori says, "and they like it."

The -10° F. freezer is operated primarily for storage of frozen meats, seafood items, and vegetables. But Liguori notes that the availability of frozen food storage space has en-

UPPER RIGHT: Roomy interior of cooler stores canned and fresh vegetables and fruit. LOWER RIGHT: Unobtrusive exterior is shielded by shrubs. BELOW: Doorway leads from kitchen into inside/outside cooler.







abled him to dramatically reduce the costs of certain hors d'oeuvres and to get more production from his kitchen workers.

"We average one private party a week," Liguori explains. "Before we had the freezer, we purchased hors d'oeuvres from specialty food suppliers. Now we make all the items ourselves."

He continues, "Several of those items — meatballs, clams casino, escargot, chicken livers and bacon, for example — can be made up in advance and frozen for later use. We can even prepare and freeze some of our entrees.

"We've cut the cost of many hors d'oeuvres by more than half. Whenever there is a slack period in the kitchen, we put the staff to work preparing items to be frozen. And we have eliminated the need to call in extra kitchen help to staff private parties. That's a fairly good payoff from a single prefabricated freezer."

The third prefab, a 38° F. vegetable cooler, is the unit that is located outside the clubhouse. Erected on a concrete pad, the walk-in opens directly into a portion of the kitchen. As with the other prefabs, the modular panels that are visible from inside the kitchen are clad with stainless steel; the other panels used to assemble the units are clad with maintenance-free aluminum.

#### Outside/inside saves space

"The 'outside/inside' installation actually permitted us to add refrigerated storage space without enlarging our club building or the kitchen by even one square foot," Liguori says. "The installation design, which was suggested by our foodservice equipment dealer, H. J. Keller Co. of Newark, is a great space saver. It also



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"The 86-year-old club serves 80 to 100 lunches a day and the same number of dinners. The menu changes daily." saved us the trouble and expense of a building addition and the costly involvement of high-priced construction trades. The vegetable cooler, for example, was assembled by two men in just a few hours."

The outside/inside cooler is protected from the weather by addition of a prefabricated aluminum roof which fits over the roof panels of the unit.

All of the walk-ins were assembled from panels which are manufactured by Bally Case & Cooler, Inc. in a large variety of standard widths and lengths. Panels are quickly assembled by means of a patented "Speed-Lok" joining and locking system. A hex-wrench-operated, cam-action arm clamps onto a locking pin for a compression-type, airtight fit between panels. The components of the device are located within anti-corrosion treated galvanized steel pockets which are precisely and permanently positioned. Within each panel, straps connect pockets located on opposite edges of the panel. The design provides the effect of surrounding each walk-in with bands of steel, enhancing the strength and rigidity of the finished structure.

The panels have an Underwriters Laboratories 25 low flame spread rating and are rated as Class 1 Building Panels by the Factory Mutual Insurance Group. These and other favorable fire ratings earned by the panels usually enable an owner to obtain low insurance rates.

The 4 inches of high-density urethane, foamed by a process unique to Bally, has more than double the insulating efficiency of any other commercially available insulation. Unlike porous insulations, such as fiberglass, the urethane cannot absorb efficiency-reducing moisture in use. The urethane is also impervious to insect or rodent infestation.

And the urethane, unlike frothed urethanes, will not swell, contract, or warp through a temperature range of from —90° to 250° F., assuring that the panels will maintain their fit regardless of weather or room conditions.

"Like our prior walk-ins, the new units will pay for themselves — many times over," Liguori concludes. "And it will be at least 56 years before we have to replace them; of that I am certain."

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