Tees: misused and abused

by Joseph S. Finger, P.E.

(This is the second half of a two-part series. The first half, on the subject of misplaced and improperly directioned tees, appeared in GOLF BUSINESS last month.)

Getting back to the old "tee box," it was not uncommon 50 to 60 years ago to build these tees with sharp slopes, since labor was only 15-25 cents per hour and golf was played primarily by wealthy people. But times have changed. One of the great things about this country is the fact that nearly anyone can play golf, or certainly the upper three-fourths of the population by income groups can afford either a private, semi-private, or municipal golf course once in a while. On those courses where it is necessary to hold maintenance to a minimum, the old tee box is a thing of the past. Tees must be maintained in the most inexpensive manner, and this means either using fairway mowers or special tee mowers (which give superior effects). To use mechanized equipment, the sideslopes, backslopes, and frontslopes of the tees must have slopes no steeper than one vertical to four horizontal; or they should have no maintainable slope at all. In the latter situation, railroad ties, stone, brick, and concrete block have been used for many years.

Another feature of low maintenance cost is to avoid having too many tees, requiring the transfer of mowing equipment from tee to tee rather than mowing in a continuous operation. The same applies for spraying, fertilizing, etc. One course in Mexico, which received a great deal of publicity in one of the golfing magazines, recently called me for consultation on what to do about some of the holes which had as many as nine different tees! Their maintenance cost was tremendous.

In my opinion, in the future we are going to see more ground cover and less grass on the sideslopes of the tees. It is not only more beautiful, but it is usually a lot easier to maintain. A few walkways through this groud cover will provide access to the various parts of the teeing areas.

"To use mechanized equipment, tees must have side, back, and front slopes no steeper than one vertical to four horizontal."

Condition of turf

Finally we get to that part of the discussion which most people automatically believe is the only problem relating to tees. This usually results from one of three things: 1) They can't get the tee in the ground; 2) they can't get a level lie; or 3) water is standing on the tee.

There is never any excuse for not being able to get a tee in the ground. If you are going to spend from $500,000 to $1,000,000 on a golf course, you ought to be able to afford $50 to $100 per tee for sufficient sand to work into the top 3 inches to permit soft teeing areas. The trouble is, by the time many construction projects get to the finishing of the tees, someone has underestimated the cost (often of the club-

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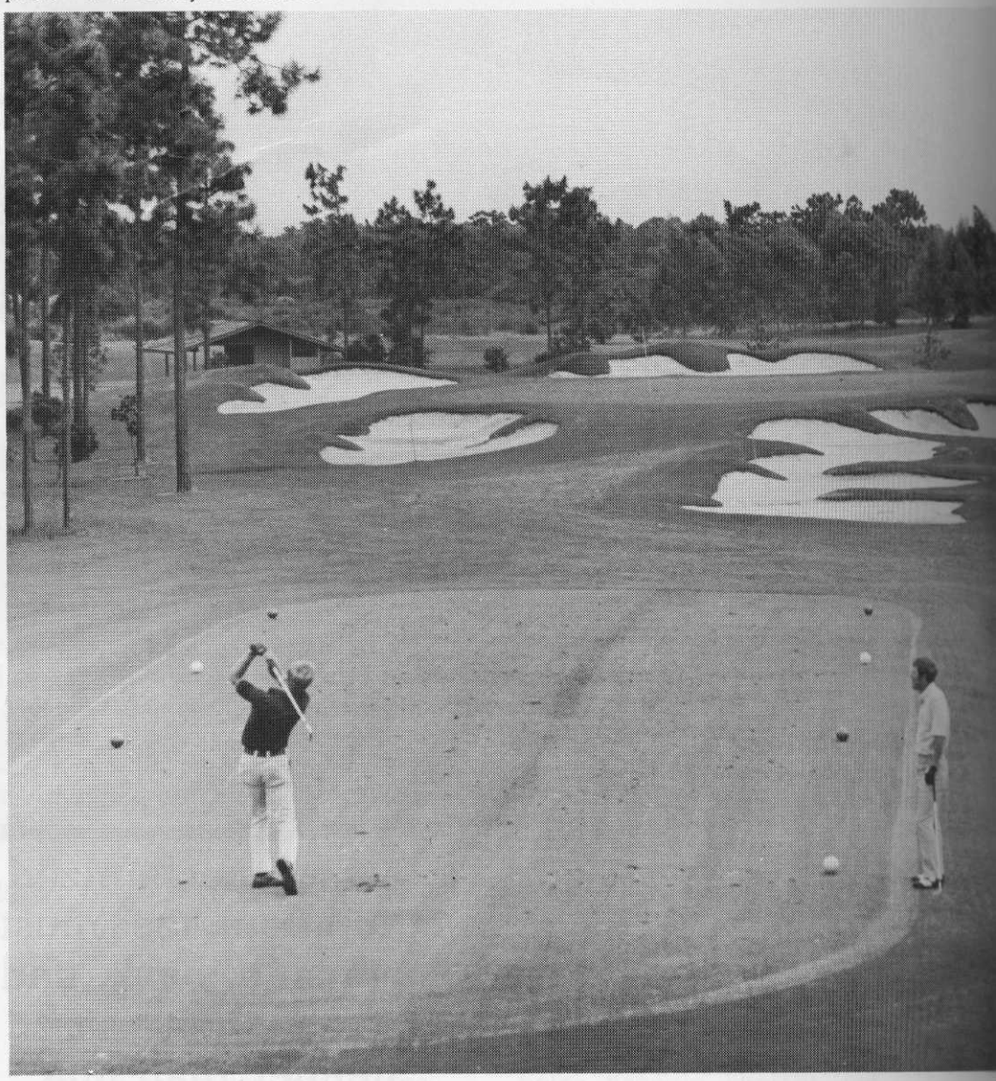

house) and there is no money left for this purpose. Either the architect, the contractor, or the owner will hope that the tees turn out soft enough so that the players won't complain. But sometimes it just doesn't work out. Sooner or later there will be additional expense of aerifying many times, topping with sandy material, and otherwise creating maintenance costs three or four times what it would have cost to construct the tees properly in the first place.

Some people believe the tees should be built the same way that USGA greens are built. This involves high permeability and very expensive sub-drains and seedbed materials. I question whether this is necessary. In the first place, most seedbeds for greens meeting USGA specifications are so sandy that it would be difficult for players to stand up on a hard drive until the turf and root system had built up over several years. Furthermore, in most cases such expensive procedures are just not necessary. If the top 6 to 8 inches of the tee contains a good mixture of at least 50 percent sand, 15 to 20 percent peat, and the remaining material either a clay loam or loam, you will probably get a good turf growing medium.

The second problem, of not being able to find a level lie, might result from poor construction techniques or from the problem of settling after the tee has been in play for from 1 to 5 years. Good construction techniques supervised by a qualified architect will avoid the first problem. There is a technique to getting tees level without wasting a lot of teeing area; and this requires a qualified contractor and/or a qualified golf course architect. If the tee has been elevated more than 4 feet, there is a good chance that the tee will settle unevenly unless correct compaction practices have been employed during construction. Whenever a tee is to be built with fill higher than 3 feet, it is wise to put the material in lifts of not more than a foot each, compacting them under proper moisture with a sheepsfoot roller until a height of 8 to 12 inches below final grade is obtained. This top 8 to 12 inches should be of the type of seedbed mentioned above.

If these techniques haven't been used during construction, or if the tee has settled unevenly, then the only thing to do is to shut down about a third of the tee at a time and remove the sod, level the tee, and either replace the sod or replant. But releveling must be done with either an engineer's level or transit; it should not be merely eyeballed. Furthermore, a 1 to 2 percent slope either lengthwise or laterally should be allowed for good drainage. I prefer replanting to resodding. Very few people can or will resod to the levels required for tees.

Often tees will hold water after rains or after irrigation because of uneven settling mentioned above, or because of poor techniques in installing the watering system. I prefer to have the watering system on the shoulder of the tee, not down the middle. There is always an excess of water collecting around the sprinkler heads, regardless of manufacturer; and this often leads to excessive settling in this spot, eventually creating a water hole. If the sprinkler heads are maintained on the shoulder of the tee, the chances are most of the water will run off the side — particularly if the tee is slightly crowned laterally with a 1 to 2 percent slope. Furthermore, if the piping in the irrigation system on the tee should spring a leak, you don't have to tear into the middle of the tee to correct it.

Teeing area

The amount of teeing area required will depend entirely on the amount of play and the shot required. Obviously, the par three holes on which irons are used will take more teeing area to allow for grass recovery than holes requiring a wood shot off the tee. I have seen various area requirements based on the length of hole, etc. Obviously, though, highly crowded municipal courses will require larger tees than country clubs which receive very little play. I personally like tees of from 40 to 50 yards in length, for the purposes of permitting higher-handicapped players to use more clubs in the bag (in spite of previous remarks), as well as to allow for different wind conditions.

The width of the tee will vary with the type of hole. I seldom find it desirable to make a tee less than 15 to 20 feet in width, and just as seldom find it unecessary to make a tee over 40

"Trees can be planted at the right distance from the tee, taking into consideration their form and rate of growth, so the situation will be satisfactory."

feet in width. With a 40-foot-wide tee, it is possible to play half of it (laterally) at any time. This gives the other half a chance to heal, without changing the distance of the hole. But since I try to shape my tees to fit the terrain or to make the tee shape more interesting, there is no firm or set pattern in tee area or construction. There are fewer low-handicap players; and, therefore, the back parts of the tees are generally narrower than the middle or front parts.

And before we leave the subject, let's not forget how many times the women are neglected by not having tees of sufficient area, levelness, or in the right position to accommodate their particular game. Womens' tees are too often an afterthought; and quite often a golf course superintendent will try to build a tee with greatly restricted funds, creating ill will for all concerned, It is impossible to build ladies' tees in the right location for all classes of lady golfers. This is an even more difficult situation than building tees for men, particularly since most clubs will look at a lady's tee as a nuisance rather than a necessary asset. (After all, probably 30 percent or more of all golf today is being played by ladies.) There are too many aspects of placing and constructing ladies' tees properly to fit this discussion; suffice it to say, they are usually either overlooked or badly neglected.

Tees, grass, and shade

Golfers must remember that the game in the teeing area, fairways, and greens, is being played on grass shorter than nature intended for that particular species. In other words, the grass is always under stress; sometimes it is under more stress than in others. Most of the grasses we like to play on are sun-loving grasses. Yet we also always like to have beautiful trees on our golf courses, particularly around the tees, where we might enjoy a cooling respite from the hot summer sun while waiting to shoot. Or, the trees might provide protection, frame the hole, etc. It is small wonder that tees often get in trouble as far as growing good turf is concerned. It may be very apparent to the superintendent or to a turf expert, but the reason the grass is sometimes so sparse on the tees is not due to the play, not due to the soil condition, and not due to the watering system — but just due to too much shade for the grass being grown. You have four choices in this case: 1) cut down a few of the shade-producing trees; 2) change grasses; 3) both; or 4) move the tee.

In the cool season areas of the United States, it is possible to use more shade-tolerant grasses, such as the fescues and even some of the bents, or poa trivialis, and usually get by.

There are some new blue grasses which are far more shade tolerant than the old strains of Kentucky blue.

In the southern part of the United States, the problem of shade-tolerant grasses is much tougher. Even though some of the hybrid bermudas are more shade tolerant than the old common bermuda, they are still not capable of withstanding close mowing in fairly dense shade. So far, none of the fescues will take the combination of low mowing height, humidity, and heat encountered for tees in the lower southern belt. Although St. Augustine grass will meet the shade requirements and stand the heat, no one wants to tee off of St. Augustine because of the tough stolons which impede the backswing and downswing of the club. Zoysia grass offers some hope; but its very slow growth rate and recovery are detriments to its use.

At the present time in the South, the best bet is to be sure that there is ample opening for sunlight between the hours of 9:00 a.m. and 12 noon, and, if possible, extend that until 2:00 p.m. Five or 6 hours of good sunlight, particularly in the morning, will usually take care of southern grasses. Sometimes this must be obtained by cutting down trees which are too close to existing tees, assuming the tee cannot be moved without affecting other trees or the play of the hole. On the other hand, additional trees can be planted at the right distance from the tee, taking into consideration their form and rate of growth, so that in a few years, the situation will be satisfactory for all concerned.

But one thing you must never forget; don't ever try to take down a landmark tree which is well-known to all the members and is revered by all, unless you've already got a new job in mind. □