# Can Grass Survive the Traffic?

By WILLIAM H. BENGEYFIELD, Western Director, USGA Green Section

If the Scots at the Links of Lieth had it to do all over again, they'd probably rewrite their Rule One of Golf:

"You must tee your ball within a club's length of the hole." But this was in 1744 and they were engrossed in writing rules, not rolling wheels and practice swings. One might guess the evolution of Rule One started right after the first foursome. Pretty soon it was two club lengths, then three and so on, until finally someone decided that the tee and the green had better be two different places. And the game of golf has never been quite the same.

Even by today's USGA definition: "The 'teeing ground' is the starting place for the hole to be played. It is a rectangular area two club lengths in depth, the front and sides of which are defined by the outside limits of two markers:"

the golf course superintendent will find little traffic relief in the Rules of Golf. He has indeed a problem, for the world has beat a path at his door.

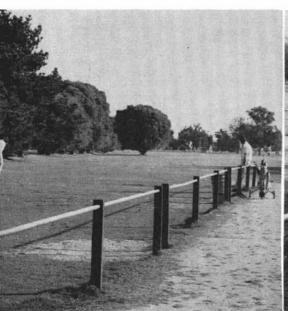
One of the doors belongs to Max McMurry, Golf Director and Manager at the Alameda Municipal Golf Course, California. Over these 36 holes, 190,000 rounds of golf are played yearly, in all kinds of weather. Every step of the traffic must channel onto each tee, and off again. Max McMurry has spent the last nine years trying to cope with the traffic problem for he believes in grass tees.

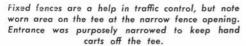
"The cart more than doubles surface wear," says McMurry. "This is as true of hand carts as it is of motorized carts. In fact, the hand cart may be

causing more damage simply because there are so many more of them in use. Forty years ago, when both types first appeared, there was little cause for alarm. But today, nearly everyone uses a golf cart of some type on our course and something had to be done to save our grass tees.

"Take a typical caddie cart case. As a player walks along pulling or pushing his cart and he approaches the location of his ball, he will inadvertently release his hand hold on the cart while the cart is still in motion and seeking its own balanced position. The base of the cart will scrape a portion of the turf. Repeat this occurrence in a concentrated area near a tee or green several hundred times a day, every day of the year for 190,000 rounds, you will soon have bare earth. Electric carts are not much better. Sudden starts, quick stops, confined parking and travel areas all take their toll in grass. No amount of resodding will ever solve the problem permanently. The answer lies in developing techniques of dewill disperse traffic sign that wherever possible and control it as much as possible in unavoidably concentrated areas. We know we cannot depend on the conscious effort of the golfer. The last thing on his mind is traffic control. He's there for recreation, not regimentation. Therefore, we must 'think for the golfer' when it comes to traffic direction. 'Subtle guidance' might be a good choice of words.

"Finally, in all our scheming, the design technique employed should not substantially add to our everyday maintenance costs."





"Thinking for the golfer" is easier said than done, but Max McCurry has been at it for some time and has come up with some interesting possibilities. Unfortunately there are no pat answers. No solution is going to work every time. But if we start with a few principles and juggle them around to fit particular cases, some satisfactory answers can usually be found.

## A PLACE TO START

The condition of the first tee on any golf course is of utmost importance. Here the member and his guest receive their first impression of course conditions and it should be an inviting one. The first tee also receives the brunt of practice swings, warm ups and, when no one is looking, mulligans. Traffic, wear and tear is greatest here. It's the place to start your cart control work.



Fixed fences also present a mowing problem. If the fence posts were set in a 'sleeve' and were moveable, mowing and entrance problems would be overcome.

## FENCE ME IN

Fencing of some kind is usually a good first thought, and a good second thought as well. Surely, some form of barrier is needed to keep the carts off and the golfers on the tee. Wooden railings, pipe or chain are effective barriers. However, when they are brought into use they create a new set of traffic problems. At entrance points through the fenced area, concentrated foot traffic soon wears the turf bare. Furthermore, long grass eventually engulfs the lower portion of the fence posts and many hours of hand labor are required to keep it trim and tidy. You wonder if any real improvement has been made.

But all is not lost. If the fence posts and railings are movable, then the above problems are easily overcome. Entrance points may be changed as







The first tee without an entrance. Also the first tee without worn paths.

often as necessary and mowing accomplished whenever posts are moved. Preset sleeves in the ground for the posts allow for easy change—a simple technique that is both effective and practical.

## A TEE WITHOUT AN ENTRANCE

Have you ever seen a tee without an entrance? Do you think it possible to develop such a tee, i.e. one protected from cart traffic by some type of barrier but still accessible to the golfer? Since there would be no specific entrance ways, there would be no worn areas to worry about. Sound impossible? Well, not to Max McMurry who has found just such an arrangement to be a most effective device, particularly on a heavy play public course.

At Alameda, a 10-inch concrete curbing has been installed on three sides of all raised tees. The 10-inch curbing allows for maximum golfer entry area (the entire tee is available to foot traffic; there are no entrance ways as such) while also allowing mechanized equipment to be used for maintenance all along the curb. If necessary, the curb may be painted a bright color with a notice "No Carts on Tees" stenciled along the side. No one can miss the sign and few will go to the trouble of lifting their hand cart onto the tee. Motorized carts simply cannot climb a 10-inch curb.

For the private club where aesthetic values would discourage concrete curbing, the same principle, i.e. no specific entrance way, may still be used. Orville Suttles, Superintendent-Manager at Woodbridge Country Club, Lodi, Calif., has modified the technique by developing a low growing, attractive and continuous hedge around three sides of the first tee. The hedge is no higher than 10 inches and is approximately eight inches wide. It can be easily stepped over by

any golfer. Boxwood, Barberry, Privet or any number of different plant materials would lend themselves to this use.

The practice putting green at Woodbridge also has a low hedge completely surrounding it. Of course, there is a small opening in a far off corner for mowing equipment to gain entrance, but that is the only break in the hedge row. The rest of it must be dense enough to discourage "cutting through" by the golfer. If a gap is allowed to develop, there will soon be an ever widening path, the barrier effect is lost and unsightly traffic conditions result. A solid, dense hedge however. effectively disperses traffic along the entire path.

The problem of trimming is easily solved by the use of electric clipping shears. It is not a big job nor particularly time consuming.

## CART PATH TRICKS

It's strange, but one of today's status symbols in country club golf is not to have hard or soft surfaced cart paths and tee parking areas throughout the course.

Like a childhood disease, cart paths are to be avoided as long as possible. But the day eventually comes, even in this age of miracles, when something must be done about the mud and worn turf near each tee. Some type of prepared surface is needed and finally accepted by the membership.

Unfortunately, a hard surfaced parking area near each tee does not necessarily eliminate the mud and wear problem. It often merely transfers it to the end of the cart path in front of the tee. To overcome this phenomenon, all sorts of circular path endings, heavy timbers blocking the way, etc. have been used to divert the

traffic and with some degree of success. However, the best solution to date seems to be that of a subtly curving path from the tee, gradually leading the golfer away from his desired course. In fact, the path should gently lead him toward the rough, a group of trees or high ground or anywhere as long as it is away from his intended direction. Since we are all creatures of habit. there will be an unconscious tendency for the golfer to follow the path to some degree. At some undetermined point, he will realize that the path is not taking him where he wants to go. He will then strike out on his own and leave the path for the fairway. Fortunately, there is enough individuality left in us that some will discover the "misdirected path" sooner than others. The result is a dispersion of cart traffic. It is spread over the gradual arc of the path and mud holes are unlikely to develop.

There is another cart path trick that should be considered for broad, wide tees. By locating the paved surface directly in the middle of such a tee, wear caused by foot traffic is more evenly distributed over the entire teeing surface. All entries and departures are not concentrated on one side. This technique also gives the superintendent an opportunity to rest one side of a wide tee more effectively.

## LINES AND SIGNS

"How effective are lime lines in guiding traffic?" A survey shows that you might expect about 50% cooperation from the golfer. Some green chairmen and superintendents feel that any diversion of traffic is worth the effort while others have found that the golfers complying with the lines soon create a path immediately

outside the lined area. This can be partially overcome by moving the line with each application of lime or gypsum. These materials usually last about a week before renewal is necessary.

A red vegetable dye, Rhodamine, has been used for several years at Brookside Park Municipal Course, Pasadena, Calif. Max Weeks, Assistant Park Director, reports this technique more effective than lime or gypsum. In addition, no residue buildup occurs as with other materials. Furthermore, there's something about a red dye on green grass that catches the eve and jolts the conscience. The color holds for about a week to ten days before mowing or irrigation obliterates it. The dye is readily water soluble and easily applied with a small spray tank.

The use of directional signs are met with mixed emotions by many superintendents. Signs are often tried and almost as often discarded as ineffective means of controlling traffic. It seems their value depends on the attitude and receptiveness of the golfer. A small sign is an awfully easy thing to overlook or ignore. A large sign has no place on the golf course proper.

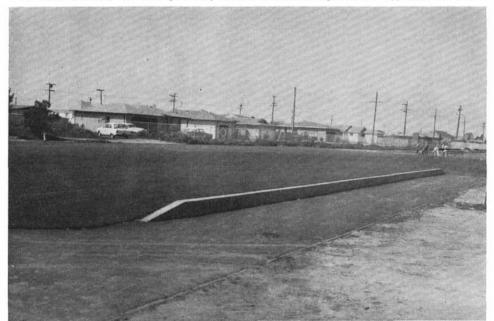
## ARE LARGE TEES THE ANSWER?

Within recent years, extraordinarily large tees have become the architectural rage. Some ranged up to 100 yards in length and they are beautiful in appearance and great conversational pieces. From a practical and maintenance viewpoint, however, excessively large tees have not helped the superintendents and have not necessarily solved the traffic problem. They require tremendous man hours for mowing and additional expenditures for extra fertilization, irrigation, etc. and much of the tee area is never used.

Perhaps the best rule of thumb regarding tee size was presented in A. M. Radko's article "Tees and the Golf Course" in the May 1964 issue of the GREEN SECTION RECORD. Radko states:

"A minimum of 100 square feet of usable tee space is suggested for each





1,000 rounds of golf per year on par-4 and par-5 holes. A minimum of 200 square feet per 1,000 rounds of golf per year on par-3 holes subjected to iron play is suggested. For tees on par-3 holes played with a wood, the same rule of thumb applies as is suggested for tees on par-4 and par-5 holes."

## THE BUGABOO

We all wish the traffic problem would simply go away; solve itself. Sadly, should this ever happen, one can be sure other problems will develop. The first one will be that of finding gainful employment in another field.

Traffic is indeed a bugaboo for the golf course superintendent, but it is a challenge as well. Design changes and "thinking for the golfer" can make a major contribution to better

traffic control and better turf. Worn paths and muddy areas are unsightly and reduce the enjoyment of the game. Ruts and pot holes are the visible signs of damage but there is the hidden damage of compaction as well. Extra aerification, fertilization and the introduction of grasses better able to withstand the pounding of traffic are all in the superintendents bag of tricks and all are needed.

More and more clubs are diverting at least a part of cart income to meet these costs. But not enough effort nor money has been devoted to design techniques to alleviate the traffic problem.

Grass tees will survive because of dedicated golf turf men like Max McMurry. All it takes is a great desire and a little study, imagination and ingenuity.

COMING EVENTS	
September 22-24	Northwest Turfgrass Conference Coeur d'Alene Country Club Hayden Lake, Idaho
Oct Dec	Turfgress Management Winter Course Pennsylvania State University University Park, Pa.
October 5-6	Prairie Turfgrass Conference Mayfair Golf & Country Club Edmonton, Alberta, Canada
October 5-7	Florida Turfgrass Conference Ramada Inn Gainesville, Florida
October 7-8	New Mexico Turfgrass Conference Western Skies Motel Albuquerque, New Mexico
October 20-22	Central Plains Turfgrass Conference Kansas State University Manhattan, Kansas
October 31 - Nov. 4	Annual Meeting of the American Society of Agronomy Columbus, Ohio
November 17-18	Minnesota Turfgrass Conference Normandy Hotel Minneapolis, Minn.
December 6-8	Texas Turfgrass Conference Texas A&M University College Station, Texas