The key to cooperation is communication rather than coercion. Reasonable people usually respond to reasonable requests if they know why. Tire tracks indicate the driver in the background, and others, stayed outside the post. No group is perfect, though, as shown by the tracks on the inside of this post.

diameter white poles (like broomsticks) with blue tops. The message is simple and understandable: Avoid this area! Again, no ropes, signs, or paint.

Let's say that these passive, positive guidelines are only 75% effective. It is doubtful that other restraints get much better compliance. Good communication usually gets good cooperation, and reasonable people respond to positive guidance more readily than negative restrictions. These fixtures present a much less cluttered landscape.



## Wheels of Misfortune

by JAMES E. CONNOLLY

Agronomist, Northeastern Region, USGA Green Section

OLF CARTS can provide benefits to golfers and golf courses. Those unable to walk long distances can still enjoy the game by riding in a golf cart, and revenue produced from rental and sales provides financial benefit to courses, golf professionals, and those involved with marketing golf carts. In some instances, golf carts can speed play, allowing for faster rounds of golf, a higher volume of golfers, and increased revenue.

These benefits, however, are often overshadowed by the negative effects associated with these units. Golf carts are sometimes viewed as motorized menaces, causing damage to golf course grounds! Golf course superintendents are all too familiar with the damage to soil structure and turfgrass caused by cart traffic. Uncontrolled, it can destroy playing conditions. Another related problem is the presence of unsightly directional accessories in the form of signs, ropes, and barriers.

Woodland Golf Club, located in Auburndale, Massachusetts, a suburb of Boston, set out to solve the problem. They knew that controlling cart traffic would reduce turfgrass damage and maintain the beauty and appearance of the golf course. Past attempts to control traffic with ropes and signs were somewhat successful, but physical directives cluttered the landscape and detracted from the appearance of the course. Another approach was needed.

Superintendent Norman Mucciarone, with the help of his son, David, and the Green Committee, recommended a program that not only described the policy for cart operation, but carried stiff penalties for violations. The board of directors accepted this plan and distributed it to the entire membership.

There is a saying: People do what's inspected — not expected. This is true when it comes to cart rules. Most courses have a written policy on cart operation, but they lack the ability to enforce the rules. Without the fear of penalty, golfers continue to ignore cart rules. For this reason, Woodland Golf Club developed a series of penalties for violations. They are as follows:

First Offense — Written Warning Second Offense — Formal Admonition from the Board

Third Offense — Suspension of Cart Privileges for One Month

Each member registers for a golf cart in the pro shop, where a number is assigned. Any member or crew personnel can report a violation. The date, violation, and cart number are turned in to the green chairman on a prepared form. More than 50 violation notices were sent out during the first summer of the program. The membership has accepted the program and is participating in the beautification of their golf course.

The benefits of the program include:

- 1. No ropes, signs, posts, etc. The maintenance crew does not have the hassle of moving these items during moving.
- The daily maintenance of the ropes and signs themselves is eliminated.
- 3. Damage to the course is greatly reduced due to the fear of penalty.
- 4. Respect for the property is instilled in the membership and staff.

Woodland is a private club, but this program may be applicable at a public golf course with some alterations. Perhaps a higher rental fee could be charged on a violator's next visit to that golf course. This would help control the chronic offender. One public course



The telltale sign of traffic on stressed turfgrass demonstrates the need for better traffic control.

gives demerits to violators, much like a traffic points system. When a certain number of points are accumulated, cart privileges are suspended. Education by the golf professional and course officials is the answer for the beginning

Golf carts have become part of golf for many people. The extent of their negative impact on golf courses will depend upon developing policies and methods of controlling traffic. Without penalties and enforcement, however, rules and regulations will probably provide little benefit.

## Ideas You Can Take to the Bunker

by CHUCK GAST

Agronomist, Florida Region, USGA Green Section

PROPER UPKEEP and maintenance of sand bunkers on a consistent basis is unquestionably a time-consuming and laborintensive task. Few other areas on a golf course demand as much attention as the sand bunker for maintaining acceptable appearance and playability on a day-to-day basis. Following are a few ideas to minimize the headaches encountered in maintaining top-quality sand bunkers.

A typical problem associated with sand bunkers is maintaining an acceptable edge at the sand/turf interface. Movement of sand out of the bunker by wind and water erosion or iron "blast" shots is a common occurrence. Foot traffic in and out of the bunkers further deteriorates turf quality on the slopes around these areas. Even with the best routine management programs, periodic renovation and resodding of the bunker edges is essential to reestablish an aesthetically pleasing character.

To assist in reestablishing bunker edges and slopes during bunker renovation, a method of vertical sodding may be just the ticket. George Thompson, CGCS, at the Country Club of North Carolina, recently utilized this procedure and found it to be very beneficial in his bunker renovation program.

As the name implies, once the bunker edge is redefined and the slopes are properly prepared, strips of sod are installed vertically along the sand/turf interface. The turf side of the sod is installed toward the turf side of the bunker. The depth of the sod (width of the cut) is determined by the degree of slope immediately adjacent to the bunker. Naturally, the greater the slope, the deeper the sod should be installed to provide the desired results.

Using vertical sodding at the edges of more steeply sloped areas around sand bunkers provides an efficient method to promote sub-surface soil stabilization and, in turn, improved turf root development on the slopes. A more natural look is achieved, since the need for plastic or plywood edging is eliminated. Through natural degradation, the vertical sod gradually decomposes as proper establishment and root development of the surrounding turf is promoted.

Another problem that commonly "arises" with the proper upkeep of sand bunkers is the contamination of the sand with small rocks that migrate to the surface. As small pebbles or shell rock work their way to the surface, bunker playability becomes less desirable. Worse yet, these "clinkers" often end up on the turf surface, waiting to inflict damage to delicate mower bedknives during the next mowing operation.

If your bunkers are heavily contaminated with rocks and debris, the best approach is completely removing the old sand and replacing it with goodquality bunker material. However, if your bunkers are only slightly contaminated, a sand screening method observed at the Links of Key Biscayne will definitely assist in prolonging the life and quality of your bunker sands.

Harry Britt, District Supervisor with the Metro-Dade County Parks and Recreation Department, and his crew have taken ordinary aluminum scoop shovels and modified them with a wire mesh insert to serve as a portable,