

## COPING WITH HEAVY TRAFFIC ON GOLF COURSES

Jerry Matthews  
Golf Course Architect  
Lansing, MI

The traffic circulation problems on today's golf courses are created by people moving about the golf course on foot, in golf carts, and by maintenance personnel conducting normal maintenance operations. Wherever these traffic patterns are repeated, wear patterns start to develop in turf areas. This problem is compounded on many golf courses over twenty years old, as they were not designed for the heavy play experienced today.

One of the primary design considerations evaluated in golf course design is safety. Safety is a very close collaboration of proper space allowances for tees, greens, fairways, roughs and related golf course amenities. Proper spatial relationships also allow for adequate, safe traffic circulation pattern. What constitutes safe distances depends upon many factors such as topography, vegetation, water and the degree of spatial relationship of one golf hole to another. It is important to carefully consider these space relationships and attempt to locate traffic patterns in safe areas. More remodeling projects are undertaken and completed to improve safety and to help alleviate circulation problems than any other reason for remodeling. In addition to safety consideration, heavy traffic wear areas created in the fairway area, or close to the approach area of a green can adversely affect the game of golf by making unfair bounces or bad lies. A further consideration of heavy wear areas is visual unattractiveness. Be it worn out turf or concrete cart paths, it is not a visually attractive feature on a golf course. Every effort should be made, if at all possible, to conceal the cart path through the use of small earth berms, tree plantings, below the crest of a ridge line or other natural feature to soften the visual effect on the golf course.

The location of traffic pattern areas should also consider soil types and proper surface drainage. Moving golfers through low areas of poorly drained soils greatly compounds the problem of mat appearance and ease of maintenance of turf and/or cart paths.

On existing golf courses what can be done to help direct golfers in tight and unsafe traffic conditions? Design considerations include analyzing tees and greens which at times must be remodeled or rebuilt to allow more space. At other times a lesser amount of change will greatly improve existing conditions. Foot and cart traffic can be directed around green areas by the remodeling of existing sand bunkers or the addition of new ones. Incorporation of earth berms with or without the sand will also help direct traffic. Tree planting can also contribute to controlling movement of golfers. Water features of course greatly effect the movement of golfers both on foot and golf carts.

Non-design considerations in controlling movement of golfers on the course come in the form of plastic chain, ropes and directional signs. These are somewhat successful, not visually attractive on the golf course, but at times the only solution.

keeping the carts from wearing out the edges. This can be done by putting a small curb on the edges, low attractive fencing can be used in some cases as well as landscape planting beds and hedges.

In todays golf market there is always the question of liability in the placement of all features of the golf course. Pending lawsuits use the shotgun approach and name everyone involved at the course. This can affect the golf course superintendent, golf professional, owner and the golf course architect, depending on their area of responsibility. Some areas of traffic movement are obvious on a golf course. The golfer must, if necessary, move from tee to green to play the game. This movement results in a fairly regular pattern of traffic which becomes obvious through a wear pattern and normally a cart path is installed to accommodate this.

There are some not so obvious things done on a golf course which affect golfer movement and have been the basis of litigation. Something as simple as the placement of benches at tees and the location of ball washers can become a problem. The placement of any item around the tee which is in front of either the back tee or middle tee must be considered very carefully. It may be construed as an invitation to the golfer to stand or park there, even though it would normally be considered a very dangerous place to be. The location of drinking fountains, rain shelters and halfway houses must also be examined in light of their safety from errant golf shots.

In summary, the nature of the game of golf lends itself to literally thousands of golf shots somewhat out of control. This, unfortunately, can cause serious injury. We in the industry cannot control the flight of other golfers efforts. What we can do is be constantly aware of the potential problems in heavy traffic areas on the golf course and to institute steps to alleviate the problem.