



The Architectural Speed Limit For Putting Greens



Maintaining appropriate putting green speeds is challenging because it involves both science and subjectivity. Green speed can also be a very emotional subject among golfers. Some see faster green speeds as more desirable, but they may not appreciate the increased maintenance costs and slower pace of play that often accompany faster greens. The appropriate green speed for a golf course depends on the availability of resources and the architectural speed limit of the putting greens. The architectural speed limit refers to the green speed above which a significant number of hole locations become unusable because balls can no longer be stopped near the hole. Going beyond the architectural speed limit can make some greens unfair and unenjoyable to play. Excessively fast green speeds can also result in agronomic problems and slow play.

Into the late 1970s, when the USGA Stimpmeter® was introduced, green speeds were much slower than they are today. The average putting green speed in 1978, measured by USGA agronomists at hundreds of courses around the United States, was 6 feet 6 inches. The average green speed today is considerably faster.

Given the slower green speeds in the past, many putting greens built years ago were designed with severe contours and steeper slopes in order to add interest and challenge. These greens had plenty of usable hole locations when they were maintained at slower green speeds. However, improved turf varieties, new mower technology and advances in the science of turfgrass management made it possible to maintain the same greens at considerably faster speeds. As courses went beyond their architectural speed limit, large portions of their greens became unusable for hole locations.



The fact that some areas of a putting green are unusable for hole locations is not necessarily cause for concern. However, when the percentage of usable area is severely diminished, turfgrass and playability problems arise. When hole locations are lost due to faster green speeds, some of the golf course's strategic interest and architectural intent is also lost. Depending on the design of the greens, losing hole locations may cause bunkers and other strategic features to have less impact on play than was originally intended. Furthermore, agronomic problems, such as soil compaction and turfgrass wear arise when golfer traffic is concentrated on progressively smaller areas. In extreme cases, exceeding the architectural speed limit can lead to a situation where there simply are not enough usable hole locations to spread golfer traffic. Turfgrass is much more likely to experience stress, disease and thinning when subjected to concentrated and unrelenting traffic.

So when does exceeding the architectural speed limit become a problem? For short periods of time – e.g., a couple weeks a year – exceeding the architectural speed limit may not cause any discernable agronomic problems. However, doing so for prolonged periods of time can have very detrimental agronomic effects. Traditionally, determining a putting green's architectural speed limit has been done through trial and error. However, digitally mapping putting surfaces is a newer technique that can take a lot of the guesswork out of the process. Learning the architectural speed limit of putting greens helps golf facilities and superintendents avoid turf problems, playability issues and slow play.