



## When It Comes To Putting Greens, There Is No Such Thing As Keeping It Simple

*Putting greens are complex systems that require careful management from the ground up.*



*Soil-based putting greens can be modified with sand through aggressive aeration and topdressing programs.*

**W**hen most people think about grass, caring for their home lawn often comes to mind. Lawns are generally mowed once per week at 2 to 3 inches in height. If the grass looks good when they pull in the driveway, the homeowner is content. Simple, right? Compare this to a putting green that is mowed daily at heights below one eighth of an inch. Golfers see the whole of the putting green, carefully inspecting the turf as they line up their putts. They often do not realize the complexity of the putting green system and the resources needed to maintain a playing surface that allows a perfect putt to find the hole.

**Grasses are specifically selected for use on putting greens.** Turfgrass breeders and natural selection have improved putting green grasses over many years. Bermudagrass, creeping bentgrass and *Poa annua* are the most commonly managed turfgrasses on putting greens in the United States. A putting green can have more than 10,000 individual plants per square foot. This equates to more than 50 million plants on an average size putting green.

**Putting greens are not constructed haphazardly.** The materials used to build new putting greens are carefully selected, tested and then retested to ensure that they meet specific requirements. New putting greens are mostly composed of sand with various amendments added in small amounts. The physical properties of a sand-based putting green rootzone are manipulated to maximize putting green performance based on local climate, water quality and other site-specific factors. Sand-based rootzones are engineered to promote rapid drainage, resist compaction and balance plant needs for water and air.





**Old, soil-based putting greens were often built to a set of specifications.** Early architects like Donald Ross developed their own methods for putting green construction that were surprisingly complex. While so-called push-up greens may be soil based and have limited internal drainage, they are not as simplistic as some would have you believe. The same basic principles that are used for successful putting green construction today were used to modify soils in older greens. Aeration and topdressing will improve drainage, increase porosity and enhance resistance to compaction on soil-based and sand-based putting greens alike. The aeration and topdressing programs that occasionally disrupt playing conditions at most golf courses are aimed at maintaining and improving putting green soils.



*The grasses used on putting greens are specifically developed to have fine texture and high plant density to provide a smooth playing surface for golfers to enjoy.*

**Modern putting greens have extensive internal drainage systems.** During construction of most new putting greens, drainage pipes are installed beneath the surface so that excess water can drain out of putting green soils. Without internal drainage, a putting green cavity is like a bathtub that will fill with water during persistent rainfall. Saturated putting green soils will cause problems with turfgrass health and playability. Soil-based greens are often retrofit with internal drainage to improve performance.

**Do not try this at home.** Many golfers have tried to build a backyard putting green with disastrous results. Resist the urge to pursue this type of project. Caring for a putting green is not the same as mowing the lawn. Putting greens are complex systems and their management is a job best left to turf professionals.