Why Is Sand Applied To Putting Greens?

For most, there are three primary characteristics that constitute a quality putting surface: (1) a smooth surface, (2) a firm surface and (3) healthy turf. There is no question that adequate sunlight, water and nutrients are essential to provide healthy turf, but what contributes to the more subjective aspects of smoothness and firmness? These two critical components are tied together by one common link – high quality topdressing sand. Since the time of Old Tom Morris, sand topdressing has been the great equalizer, helping to dilute organic material and create smooth, firm surfaces. These benefits are discussed in detail in the article, “Managing Organic Matter in Putting Greens” and the USGA Collection, “Managing Soil Organic Matter.” Applying sand to the putting greens is often a source of frustration for some players, but a quick look at how putting greens would perform without sand topdressing reveals its importance.

Putting greens are comprised of different types of grasses but they all have one common trait – they must be healthy and consistently growing to recover from the heavy traffic associated with the game of golf. However, balancing turf recovery with playability requires careful management. As grass grows it produces organic material such as roots, shoots and lateral stems. If this organic material is not diluted by sand topdressing it can accumulate and act like a sponge, holding excess water near the surface. If excessive organic material accumulates, putting green health and playability will decline. Walking across a soft, saturated putting green can leave footprints that impact surface smoothness,
and golf balls landing on soft putting greens will create deep ball marks. Unless it is addressed, this sponge effect will continue to worsen over time. The solution to these problems is regular applications of topdressing sand.

At most golf courses, topdressing sand is applied every seven to 28 days. Ultimately, the appropriate application rate and interval of sand topdressing depends on the rate of turf growth and the overall putting green management program. However, the goal of light and frequent topdressing is the same at every golf course, regardless of budget – minimize the negative impacts of excessive organic material and traffic. Creating a homogenous mixture of sand and organic material just below the putting surface will improve turf health and playing conditions by helping to maintain a better balance of water and air. This balancing act is facilitated by careful water management practices that include both nighttime irrigation and supplemental daytime hand watering where needed. Regular topdressing and precise irrigation enhance putting surface smoothness, firmness, turf health and overall playing quality.

So the next time you tee it up, remember that sand is applied to putting greens to create the smooth, firm surfaces that everyone enjoys.