

Five Reasons Why Bunkers Are Not Consistent

By Brian Whitlark, agronomist, West Region | June 16, 2017



Despite the best efforts of any agronomic team, maintaining perfectly consistent playing conditions in every bunker is not possible.

Although golf course maintenance teams may spend more labor hours attending to bunkers than greens, golfers will still find that bunkers are inconsistent. Maintaining totally consistent playing conditions in bunkers is not achievable, nor is it necessarily desirable. Here are five reasons why the playing conditions in bunkers will never be perfectly consistent:

1. Sand depth – The depth of sand on the bunker floor has a profound impact on playability. If the sand is too shallow, bunkers may be wet and firm. However, too much sand yields soft conditions that increase the probability of buried lies. Inconsistencies in bunker sand depth develop on a daily basis from events such as normal play, raking and wind exposure. The recommended depth for bunker sand is 4-6 inches but varies depending on factors such as the physical characteristics of the sand and the properties of the underlying material.
2. Sun exposure – Bunkers that receive more sunlight will dry faster and play softer than those that receive less sunlight. For example, east- and southeast-facing bunkers dry faster in the morning than bunkers oriented to the west or the north, causing them to play softer.

3. Wind exposure – Bunkers facing the predominant wind direction will dry faster and play softer than bunkers that are shielded from the wind or face the opposite direction.
4. Play volume – Bunkers that receive more play will be softer and less consistent than bunkers with very little play. Why? Golf shots, foot traffic and raking disturb bunker sand and soften conditions.
5. Irrigation – Many golfers wonder if irrigation systems can be designed to avoid adding water to bunkers. Unfortunately, such a design is impractical due to the shape and strategic location of many bunkers. Uniformly irrigating irregularly shaped playing surfaces such as greens, green surrounds and even fairways often places adjacent bunkers in the line of fire of sprinklers. If bunker sand is shallow, contains fine materials such as fine sand, silt and clay, or has been contaminated with organic matter, bunkers will retain moisture. Wet sand plays firmer than dry sand, so bunkers that receive more irrigation and retain more moisture will likely play firmer than those that are well drained and out of the way of irrigation. In the Southwest, where there is little rain and high water demand during summer, bunkers are often wet and firm due to frequent irrigation.

The bottom line is that golf is an outdoor game with inherent variability. For example, no two lies in the rough are exactly the same and, like it or not, the wind blows on some days while other days are calm. Sometimes the wind even blows from one direction in the morning and the opposite direction in the afternoon. Golfers are encouraged to embrace variability in the bunkers and throughout the golf course as a welcome challenge. Remember the wise words of the late Payne Stewart, "A bad attitude is worse than a bad swing." For additional information on bunker consistency, please review the Green Section Collection, "[Managing Bunkers](#)," or contact a [USGA agronomist](#).

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