USGA REGIONAL UPDATE



Why Are The Greens So Wet?

By Pat Gross, agronomist, West Region

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The past month of hot, humid weather has taken its toll on *Poa annua* putting greens in the southwestern area of the West Region. One of the most frequent questions from golfers in recent weeks is, "Why are the greens so wet?" Admittedly, in some cases the greens are wet; however, in many circumstances the greens are not overwatered but still they seem soft and wet. What causes this situation? Here are three reasons why greens may seem wet when they really aren't:

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Sodium accumulation can disperse organic matter in, making greens feel sticky and wet even though they are not overwatered.

1. Weak root system and lack of sod strength—Poa annua greens use more energy for respiration during the summer than they are capable of generating through photosynthesis. The article, "Burning the Candle at Both Ends," explains this situation in more detail. The deficit in energy production causes the plant to consume all the energy and carbohydrates that were stored in the root system during spring. By the end of summer, Poa annua greens can run out of reserves and hit the "dead zone". The greens may then exhibit a soft surface and weakened root system. Furthermore, the greens become vulnerable to a variety of fungal diseases, such as Summer Patch, that can further degrade the root system. The end result is putting greens comprised of very tender grass plants that seem wet, even if there is no excess water in the root zone. The plants simply are trying to survive.



- **2. Sodium buildup**—People often think salts and sodium are the same thing, they are not. Various chloride and sulfate salts that naturally occur in soil and water can limit water uptake by plants, especially during the summer. Sodium is a different animal. While sodium can negatively affect roots and shoots, it most often causes a dispersion of organic matter that plugs the surface of putting greens. Samples taken from sodium-affected greens often feel sticky and have a glue-like consistency. Golfers may see some mud sticking to their ball and believe it is the result of overwatering. However, this may be a symptom of sodium accumulation, not overwatering.
- **3. Deep watering**—A common practice at many golf courses in the Southwest is periodic deep watering of greens, also known as leaching. The long, slow and steady application of water flushes harmful salts and sodium down through the soil profile and away from sensitive turf roots. The article, "Know when to Overirrigate," provides more detail on this process. For greens built according to USGA recommendations, deep watering typically results in firmer surfaces. However, greens with poor internal drainage can remain wet and soft for several days following leaching. In this case, temporary wetness is part of an important maintenance practice.

The good news is that autumn is just around the corner. Greens that seem wet now will start to recover and regenerate a stronger root system as soil and air temperatures become cooler.

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