

Green Section Record

REGIONAL UPDATE

June 7, 2019



Superintendents watch as sand is incorporated into the putting surface using a homemade brush system mounted on a riding mower.

HIGHLIGHTS FROM THE SECOND ANNUAL USGA SURFACE MANAGEMENT WORKSHOP

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Most courses are able to produce healthy bermudagrass greens throughout the year, but taking the greens from healthy to high-quality putting surfaces requires a balance of science and art. The art involves daily observation and willingness to experiment and learn what practices and what level of intensity result in the best putting surfaces at your facility. Wally Dowe, director of agronomy at Ventana Canyon Golf Club, and Michael Roddy, superintendent at SaddleBrooke golf course, hosted this two-day workshop on May 29 and 30. The workshop explored the critical practices and programs required to achieve smooth, dense and well-paced putting greens. Here are some takeaways from the workshop:

- Favor preventative strategies over reactive or corrective practices. Avoid the “gouge and fertilize” approach which uses deep vertical mowing and aggressive aeration to correct elevated thatch levels. Such aggressive practices are often followed by nitrogen inputs to hasten the healing process, which

creates more thatch. Instead, use frequent, light-intensity and golfer-friendly practices to maintain good density, upright growth and to avoid thick turf that is prone to scalping.

- Verti-grooming is a practice that is similar to vertical mowing and grooming. This practice involves minimal surface disruption and ball roll will be smooth the same day. The vertical mowing blade depth may vary from 0 to 0.110 inch below the bottom of the rollers. The depth will vary depending on blade geometry and the amount of wear. Measure the depth with a gauge and make field adjustments so that the blades cut stolons and stems, but the result is a golfer-friendly surface. Ventana Canyon uses a [unique verti-grooming tool](#) with angled blades to achieve similar results to vertical mowing without the visible lines.
- The agronomic team at SaddleBrooke use a riding mower equipped with vertical mowing blades set 0.031 inch below the bottom of the rollers to achieve the desired verti-grooming effect. A riding mower equipped with a stiff, gear-driven brush operated in a reverse rotation and set 0.080 inch above the bottom of the rollers immediately followed verti-grooming. This operation successfully cleaned up the surface in preparation for topdressing.
- Topdressing is a critical practice that needs to be performed on a regular basis – as often as once per week and no less than twice per month during the growing season. Rates may vary from 40 to 150 pounds of sand per 1,000 square feet.
- Use a golfer-friendly sand and employ a [light and frequent topdressing program](#). A golfer-friendly sand will contain more than 50 percent of its particles in the medium size fraction without having excess fines. Varying the sand applied throughout the year can help to maintain dense, smooth putting surfaces without causing increased surface moisture or reduced infiltration rates. Attendees unanimously agreed the sand applied at SaddleBrooke improved surface smoothness and pace.
- Growth regulation is another important part of successful ultradwarf putting surface management. Superintendents discussed using a mixture of prohexadione calcium and trinexapac ethyl. Comments indicated that the prohexadione calcium will enhance color when tank mixed with a micronutrient package including iron and manganese. However, to maintain the desirable density and narrow, tight leaf blades, continue to include trinexapac ethyl. The appropriate rates for each product vary widely depending on factors such as temperature, sunlight intensity, nitrogen inputs and humidity. Begin spraying with light rates and adjust based on turf response.
- Grooming is also used frequently at both golf facilities. Groomers should be run in reverse rotation and the appropriate depth will vary widely depending on blade geometry, width, spacing, growth rate and the desired outcome. Favor a golfer-friendly setup using non-carbide-tipped blades to minimize tearing and shredding of the leaf blades.

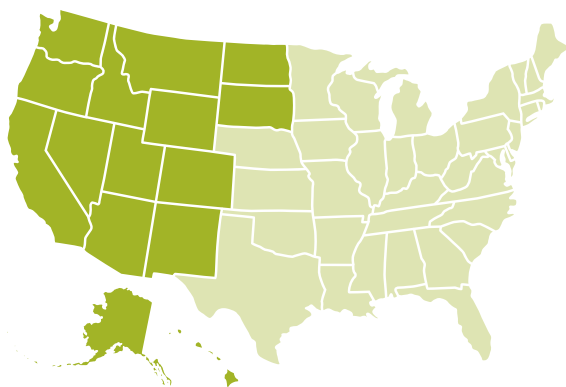


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- Minimize growth between mowing events to improve smoothness, reduce the effective height of cut and improve the quality of cut. Minimize aggressive growth with growth regulators and use nitrogen inputs only when necessary. In the Southwest, it is likely that no nitrogen should need to be applied during the summer months and only 0.25-0.30 pounds of nitrogen per 1,000 square feet should be applied during aeration.
- When scalping occurs, rather than raising mowing heights, consider raising the ground level with sand topdressing. At SaddleBrooke, a prism gauge revealed that the effective height of cut was reduced by 0.015 to 0.020 inch immediately after topdressing because the sand effectively raised the ground level. Additionally, resist the urge to deep vertically mow if scalping occurs. Continue with the verti-grooming program and increase its frequency to as much as two or three times per week.

Thank you to Wally Dowe, director of agronomy at Ventana Canyon Golf Club and Michael Roddy, superintendent at SaddleBrooke, for hosting the two-day workshop. A special thanks to Chris Hartwiger, director of the USGA Course Consulting Service, and Rodney Lingle, golf course superintendent for attending and offering a southeastern perspective.



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