



An asphalt grinder pulverizes the soil on an athletic field in preparation for a new hybrid bermudagrass surface.

PUVERIZE YOUR WAY TO HYBRID BERMUDAGRASS FAIRWAYS

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Water cost, availability and quality are concerns shared by all golf courses. An increasing number of golf courses are recognizing that converting fairways from cool season grasses or overseeded common bermudagrass to hybrid bermudagrass offers significant water savings. Water containing elevated salt loads also can be used on non-overseeded hybrid bermudagrass with success. While replacing cool season grass with hybrid bermudagrass requires thorough planning and significant cost, converting from common bermudagrass to hybrid bermudagrass adds an extra layer of complexity.

Eradicating common bermudagrass is not possible, so courses are implementing cost-effective strategies to suppress the common bermudagrass while establishing the new hybrid bermudagrass. Some facilities have found



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that pulverizing the soil can suppress common bermudagrass enough to create a good opportunity to sprig or sod the fairways with a new hybrid bermudagrass. Here are some key steps involved with this strategy:

- Ideally, three applications of glyphosate plus fluazifop should be made at 21-day intervals. These applications severely suppress the common bermudagrass. Also, the pulverizer process is more efficient when there is less surface green waste – i.e., sod mat – present.
- Sprinklers should be removed, or the contractor can sod cut around sprinklers and valve boxes. The contractor also can sod cut the fairway perimeter.
- An asphalt grinder is used to pulverize the soil to a 4 to 6-inch depth. No material is actually removed during the process.
- Box scrapers and a cultipacker are used to compact, rough grade and smooth the pulverized fairways. However, some hand work will be necessary in tight areas or steep slopes.
- Where necessary, install drainage in localized, low lying areas.
- Depending on the quality of the soil, a 1 to 2-inch sand cap may be appropriate at this point.
- Reset sprinklers once the final grades are established followed by sprigging or sodding the hybrid bermudagrass.

How much does it cost?

A qualified contractor can conduct the soil pulverizing, recompacting and regrading for about \$0.20 per square foot. The machine can pulverize roughly three acres per day depending on local site conditions. This cost does not include mobilization though.

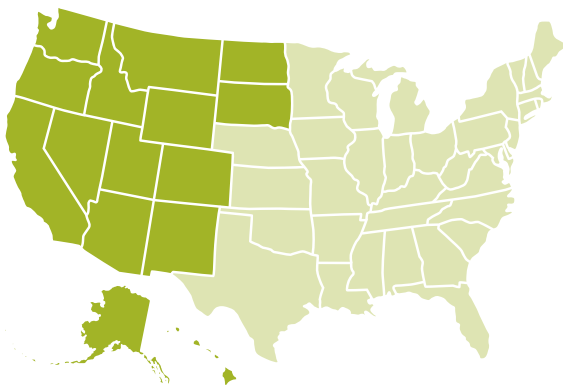
Sod plus installation will cost approximately \$0.45 to \$0.60 per square foot. Sodding is preferred to sprigging in order to mitigate the revival of common bermudagrass and other weed species. Overall, cost savings are estimated to be 20 to 30 percent lower when compared to alternative methods that require removing green waste and soil or burying this material on site.

How much common bermudagrass comes back?

At courses that have employed this technique, the amount of common bermudagrass coming back has been negligible, especially when sodding. If the new turf is established with sprigs, a higher percentage of common bermudagrass will come back. However, two to three years after pulverizing, the results indicate less common bermudagrass resurgence than traditional methods that rely on chemical suppression or surface material removal.

The pulverizer method is relatively new, but it is gaining popularity. A few more courses plan to use this renovation strategy in 2019, and they will reap the benefits associated with new hybrid bermudagrass fairways. Each course will be able to use less water and provide better playing conditions year-round when compared to cool season or common bermudagrass fairways.

Best wishes in 2019 and please do not hesitate to contact the USGA Green Section for more information on this technique or other agronomic practices.



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