



Black algae crusts can form on steep bunker slopes that receive little cultivation. Periodically scratching the surface helps to prevent the formation of algae.

THE PROBLEM OF ALGAE IN BUNKERS

BY PATT GROSS | REGIONAL DIRECTOR, WEST REGION

During Course Consulting Service visits over the past two years in the Southwest, there has been an observed increase in algae growth in sand bunkers. Here are the common denominators of this issue:

- Algae infestations tend to occur in premium bunker sands composed of a higher percentage of angular, fine sand that produces firmer surface conditions and enhanced playability. These sands tend to pack together more tightly, thus reducing water infiltration and drainage. These sands also tend to have a brilliant white color, which makes for an attractive presentation but also makes any contamination very visible.
- In nearly all cases, the algae growth is in bunkers with porous durable liners that create a perched water table and persistent wetness in the



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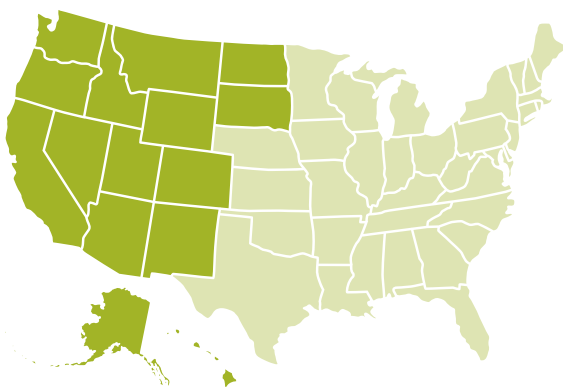
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sand. Prior to installation of these liners, manufacturers recommend that a moisture release curve be performed on the proposed bunker sand to determine the depth of sand needed so that the sand drains properly. While this is helpful in bunker floors, sand depth is considerably shallower on bunker slopes and does not impact moisture retention in the same manner.

- Algae growth is more common at courses that employ a technique of smoothing the sand on bunker slopes to allow balls to release and roll to the bottom, a technique known as the “Aussie Method” of bunker raking. By not cultivating the sand on the bunker slopes, a crust tends to form on the surface that contributes to algae and weed growth.

Treating algae on greens or other turf areas is tough enough, but what is the recommended protocol for treating algae in bunkers? First, it is important to cultivate the sand to enhance water percolation and drainage. This does not mean that the “Aussie Method” needs to be abandoned, but cultivating the sand two or three times per week will help reduce algae growth. Second, many superintendents will have their staff periodically scrape any algae crust off the surface with a shovel and add fresh sand. In severe cases, this may be done as frequently as monthly. As a last resort, some courses completely replace the sand with a more coarsely graded material that has better drainage characteristics.

An often-asked question is: “Can something be sprayed or applied to bunkers to control the algae?” The answer is yes. The same fungicides used to control algae on turf will also suppress algae on bunker sand. But spraying such materials on bunkers may not be consistent with label directions and could be against regulations, therefore this approach is not recommended. It is also important to ask if spraying fungicide in bunkers is a good example of sustainable maintenance practices? You be the judge.



WEST REGION AGRONOMISTS:

Patrick Gross, Regional Director, pgross@usga.org

Larry Gilhuly, Agronomist, lgilhuly@usga.org

Brian Whitlark, Agronomist, bwhitlark@usga.org

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