

To Cover or Not Cover Greens That is The Question

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As the end of the season draws near many superintendents begin to wrestle with one of the more controversial maintenance practices employed across the region — the use of greens covers. Their decisions are further complicated by the wide varieties of covers on the market. The choice was simple in olden days as greens were sometimes covered with evergreen branches to hold snow cover. Now covering greens can be as simple as applying a moderately heavy application of sand topdressing to greens after the final application of snow mold fungicide is made. In contrast, covering greens can be as complicated as (1) applying a breathable geotextile fabric, (2) applying a 12" layer of straw over the fabric cover, and then (3) topping off the green with a waterproof plastic cover. In between the two extremes are:

1. Covering greens with an 80:20 mix;
2. Ultra-thin spun fiber covers;
3. Dark breathable geotextile (Evergreen-type) covers;
4. Light breathable geotextile covers;
5. Relatively thick woven turf blankets (Warren's type);
6. Clear waterproof plastic sheeting;
7. Black waterproof plastic sheeting;
8. Reflective waterproof covers;
9. Wood fiber excelsior mats;
10. Combinations of the above covers;
11. Variations of the above covers.

MGCSA Events at December Conference

Past Presidents Luncheon

Hilton Hotel
Thursday, December 10
12:00 Noon

Annual Meeting

Minneapolis Convention Center — Room 103A-F
Thursday, December 10
4:45 p.m.

Hospitality Night

Seasons — Minneapolis Convention Center
Thursday, December 10
6:00 p.m.

For every superintendent who religiously embraces the use of greens covers, you will find one who has absolutely no use for covering greens. Surprisingly, there are a number of converts each season — staunch supporters of covers will abruptly go naked and the "let nature dictate the severity of winterkill" encampment will begin covering greens. The take-home message is plain and simple: sometimes covers definitely prevent winterkill, sometimes they don't and once in a while they make matters worse.

All types of covers generally provide effective protection from wind desiccation during an open winter. A wide variety of the fabrics can also be useful for raising soil temperatures to jump starting the growth of turf on greens during early spring. Forcing early season turf growth can be helpful on new greens that were seeded late the previous fall. When winterkill occurs, covering turf during early spring can also accelerate the recovery process. In addition, there will be no controversy over winter play on greens that are covered.

Only the thickest, bulkiest types of covers, however, have any appreciable ability to insulate greens from rapid drops in temperature during a mid-winter freeze/thaw cycle, an essential ingredient of crown hydration-type winterkill. Furthermore, the turf under certain types of covers is probably more susceptible to snow mold compared to uncovered turf. Yet each spring there are a number of undeniable examples where the covered greens at a particular golf course survived the winter in better condition compared to uncovered greens at nearby courses.

The potential for consistent snow cover over the winter, the percentage of *Poa annua* in the putting surfaces and the surface drainage characteristics of greens are only a few of the many factors to consider before making a decision to cover greens. The cost of the covers and the availability of labor during late fall and early spring to cover and uncover greens needs to be considered as well.

Covers are not the panacea for all winterkill concerns. The judicious use of covers on certain types of greens, though, can improve the odds (not guarantee) that the turf will survive the winter. The debate over covers will rage until research documents the specific weather conditions and other factors that cause the wide variety of winter-related injury to turf across the North Central Region. Whether to cover greens is just another one of the difficult decisions superintendents must make each season — as they say, if it were an easy job, anyone could do it.