

ICE AND SNOW

by **TIM P. MORAGHAN**

Agronomist for Championships, USGA Green Section

THE ABILITY to be innovative during times of duress is one of the finer attributes in the superintendent's personal arsenal. This character trait came to the forefront for Michael DiBlasi, of Plum Creek Country Club, in Castle Rock, Colorado, last winter. Plum Creek Country Club is an exposed prairie-style golf course with Penncross creeping bentgrass tees, greens, and fairways, surrounded by fine fescue roughgrass.

Being an open course at high altitude, Plum Creek is often exposed to Mother Nature's changing temperament in regards to weather.

During November of 1991 the weather had been mild, with warm temperatures prolonging the growing season. Playing conditions were fine, and thoughts to winter disease protection for the turf were in the planning stage. The conditions on November 11 were clear, sunny and 71 degrees. Snow

and cold weather seemed remote at this time, and the turf was growing and lush green in color. However, the next day produced a drastic change. An unexpected front moved in, the temperature dropped, and 11 inches of snow fell, covering the golf course with a thick winter blanket and catching Michael's golf course without its usual application of snow mold fungicide.

The hope was that warm temperatures would return and melt away the

With no frost, no frozen turf, no protective fungicide, and plenty of succulent bentgrass under three feet of snow, pink snow mold had all of the right conditions for activity.





An early fall snowstorm in Colorado brought worry about the potential outbreak of snow mold. The quickest way to remove the snow was a snowblower set three inches above the turf.

snow in short time, and that the preventative fungicide application could be made. But it wasn't to be. The cold temperatures never broke and by New Year's another foot of snow had fallen. The golf course was buried under three feet of snow. No frost, no frozen turf, but plenty of succulent bentgrass under snow without a protective fungicide.

Michael and his staff waited until they could wait no longer. Taking shovels, they proceeded to uncover areas throughout the course to see if disease activity was occurring. To their shock, the spread of pink snow mold was extensive. Not wanting to lose their fine fairway turf in the spring, Michael began to think of ways to remove the three feet of snow — not an easy task when you have 31 acres of fairway turf.

Evaluating the situation, Plum Creek had the advantage of being open and having relatively flat fairways. What would be the quickest way to remove

the snow without causing any damage to the turf? Michael thought that if you could use a small snow blower and shovels to clear the putting greens, why not extend the operation to the fairways? Researching this idea, he located and purchased a six-foot-wide tractor-mounted snow blower, and the removal process was underway.

The snow blower was set three inches above turf level to avoid scraping and scalping the high points on the fairways. The operator started in the center of the fairway and moved outward to the edge. When he reached a point where the fairways bowled up, another tractor mounted with a box-blade moved away the remaining snow. The existing layer of snow and ice was made thin enough that the sun could melt it away. By removing the layer of snow, the turf was allowed to dry and freeze. The application of snow mold fungicide could then proceed without worry of additional snow cover.

Michael's innovative thinking saved Plum Creek lost revenue from a delayed opening in the spring and the time spent in renovating and regrassing the fairways. The snowblower was relatively inexpensive and is on hand for future use. To summarize his successful program:

Objective: To remove three feet of snow from 31 acres of fairway turf as quickly and economically as possible.

1. Purchase of a six-foot-wide industrial snowblower — \$2,400.
2. Tractor rental for one week — \$1,850.
3. No additional labor required; all done in-house.
4. Damage done in the removal process — estimated at 3,100 square feet of sod. Repair to be accomplished in the spring.
5. Snow mold protection applied.
6. Further monitoring of disease progress following future snowfalls.
7. Peace of mind knowing that Plum Creek is prepared for the future.