



Extended periods of below-freezing weather can be particularly damaging to bermudagrass greens. Covers are the best defense against cold-temperature injury on bermudagrass greens.

WINTER'S IMPACT ON THE PUTTING GREENS

BY USGA GREEN SECTION

Golfers everywhere are eager to get out on the course and start sinking par and birdie putts. Unfortunately, winter is having a long-lasting impact on putting greens in many parts of the country.

The winter was quite severe in portions of the Southeastern United States. Cold weather – even record-setting low temperatures – lasted much longer than normal. Some parts of the South even experienced freezing temperatures and snow for the first time in almost [twenty years](#). Unfortunately, these conditions have resulted in moderate to severe winter injury at some courses with ultradwarf bermudagrass.

Ultradwarf bermudagrass – a warm-season grass commonly used on putting greens across the South – performs best when the weather is hot. As a warm-season grass, it is sensitive to cold temperatures. Extended periods of below-freezing weather can be particularly damaging to ultradwarf bermudagrass putting greens.

While creeping bentgrass – another commonly used grass on putting greens – better tolerates freezing temperatures than bermudagrass, it struggles to perform when temperatures are above 80 degrees Fahrenheit for extended periods. A cool-season grass, creeping bentgrass is not well-adapted to the sustained hot and humid conditions common throughout much of the South.

To help protect ultradwarf bermudagrass putting greens from freezing temperatures, golf courses take several precautions:

- Superintendents prune or remove trees that create shade to increase sunlight and temperature on greens.
- Although counterintuitive, some superintendents apply overnight irrigation if freezing temperatures are forecasted for only a few hours. This moisture can actually increase temperatures to provide short term protection to grass from freezing temperatures.
- A variety of tools like portable moisture meters are used to ensure the grass has adequate moisture so it is less susceptible to cold-temperature injury.
- Some superintendents spread saw dust, mulch, hay or pine straw over bermudagrass putting greens before cold weather to insulate them from freezing temperatures.
- Covers often provide the best level of protection for bermudagrass greens during freezing temperatures. These specialized tarps are often deployed to cover putting greens and insulate them from freezing conditions, especially when temperatures are forecast to fall below 20 degrees Fahrenheit.
- When temperatures are expected to persist below 20 degrees Fahrenheit for several consecutive days – or temperatures drop into the single digits – a combination of tactics are often used to protect bermudagrass playing surfaces. By first spreading pine straw or laying fixed materials like drainage pipe or pool noodles on a putting surface and then covering it, superintendents can [create an air gap between the cover and the turfgrass surface](#). This air gap provides even more insulation than either of the strategies provide individually.

Covers can be particularly helpful at preventing winter injury on bermudagrass greens. Unfortunately, many of the golf courses in the South that experienced damage this winter either did not have covers or only had covers for some of their greens. In some areas, having covers is a lot like having hurricane insurance – most years the risk isn't high enough to justify the cost for someone that lives 100 miles or more from the coast, but all it takes is one particularly damaging hurricane to make them wish they had purchased the coverage. Like an insurance policy, covers are an effective way to protect bermudagrass putting greens during freezing temperatures. But covers do not offer an absolute guarantee and it only takes one very cold night for damage to occur.

Whether the next winter is severe or mild, acquiring putting green covers should offer some peace of mind. It's always good to be prepared and have something that is only needed occasionally than to need something that you don't have.

Depending on location, good growing conditions for bermudagrass might not return until late May or early June. Until then, making a determination about putting green health and taking action is premature. Be patient as superintendents are eagerly preparing for the return of favorable weather. Prematurely pushing putting greens to grow with increased fertilizer and water when conditions are unfavorable presents added risks. After a challenging winter, you can rest assured that the aptitude and skill of the golf course maintenance staff will have the greens in great condition as soon as possible so you can make plenty of pars and birdies.