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## Repairing Winter-Damaged Greens

by Dr. Leah Brilman

**P***oa annua* golf course greens in the Pacific Northwest and other locations have suffered a significant amount of damage due to a severe cold snap. For many greens there were multiple factors that contributed to this damage, including *Pythium* outbreaks and shade issues. Using a blend of seed now to repair this damage will help you get back into play sooner and will reduce pressure from members. The soil temperatures have been adequate for germination of this blend, where all the components have been selected for compatibility on a golf course green and germination under low soil temperatures. **EmergenCC – PNW Greens**, composed of: 25% MacKenzie creeping bentgrass, 25% SR 5130 Chewings fescue, 25% Shoreline slender creeping red fescue and 25% Quasar *Poa trivialis*, was developed after discussions with turf scientists in Washington and Oregon. We also offer this without the *Poa trivialis* component for those who do not want to introduce rough bluegrass to their golf course. The *Poa trivialis* is one of the best species for germination in cold temperatures and in the shade but can become a weed if not handled carefully. Our *Poa trivialis*-free formulation is 30% MacKenzie creeping bentgrass, 35% SR 5130 Chewings fescue and 35% Shoreline slender creeping red fescue.

MacKenzie creeping bentgrass germinates well with cool temperatures, has a brighter green color than many creeping bentgrasses and density that blends well with *Poa annua*. The SR 5130 Chewings fescue and Shoreline slender creeping red fescue have been used for both bermudagrass greens winter-overseeding and for permanent greens on links style courses. The fine texture and upright growth provide excellent putting quality and the quick establishment enables greens to be played on sooner. Some



superintendents are asking golfers to play on temporary greens and are hoping that their permanent greens will be back in play by June.

In the Northern-tier States and in Canada, variations on these blends have been used for many years after winter damage. These blends have enabled the greens to be back in play significantly sooner. Waiting for your *Poa* greens to recover from extensive damage can also limit your use of chemistry to control seedheads, so the greens may have less uniformity for many months to come.

What techniques have been used to reestablish these greens?

1. Hole punching with a solid quadra-tine followed by seeding and topdressing has been successful.
2. A light verti-cutting in two or more directions followed by seeding and light topdressing has also been effective in placing closely spaced rows of turf.
3. Spikers have also been useful and may help break up any mat that may be sealing the surface.

The trick with all methods is to insure that the seed is planted within the thatch and mat so that it does not rest on the surface where it will not germinate. The seed needs to be covered by a thin layer of topdressing so that it will remain wet and germinate. Tools such as the Job-Saver aerator attachment, which produces numerous small, shallow holes, also increase the success of an inter-seeding program. Dimple tines have also proven useful in creating areas for germinating seed on damaged greens.

A seeding rate of 3–4 lbs/1000 sq. ft. insures sufficient seedlings for rapid turf establishment and resumption of play – increase the seeding rate if no rough bluegrass (*Poa trivialis*) is included. Insure adequate water and fertilizer is available for these young seedlings. Start mowing once you have a good stand to encourage tillering. Soil temperatures are adequate now for germination to start; the sooner you seed, the sooner the greens will be back in play.