

**IMPACT  
ON THE BUSINESS**

## Keeper of the velvet greens

BRENT ROGERS, SUPERINTENDENT AT EAGLE'S NEST GOLF CLUB IN MAPLE, ONTARIO, SHARES HIS PERSPECTIVE ON WHAT IT'S LIKE TO MANAGE VELVET BENTGRASS GREENS. **BY MARISA PALMIERI**

### How is maintaining velvet bentgrass different from other types of turf you were most familiar with?

My previous experience was with *Poa annua*, Pennncross, Penlinks and Providence creeping bents, from the West Coast of Vancouver to the East Coast of Cape Breton Island, Nova Scotia. The very first head-scratching issue I had was just after seeding [in 2002]. It was the traditional seven to 10 days to germinate, and then it was like watching molasses. It took weeks for the greens to thicken up. I understood that I was dealing with a strange animal to begin with – bunch-type growth and absolutely no stoloniferous growth habits that a conventional creeping bentgrass inherently possesses – but this was absurd. [Architect] Doug Carrick would come for his site visit and pace around like an expecting father wondering if the greens ever were going to fill in; the ownership had the same puzzling look on their faces. This was the nature of the beast. Don't expect quick establishment; it's not going to happen. Because of the super fine leaf blade, velvet bentgrass has such an incredible density to it, so fine, so dense, so upright – the perfect putting surface. In fact I had a conversation with Dr. Peter Landschoot from Penn State just last year and he said, "Velvet is the finest putting green grass in the world." Unfortunately, velvet has fallen by the wayside since its trendy reintroduction back in the early 2000s.

You have to appreciate that there are no text books; there's very little if any current literature regarding growing and maintain velvet bentgrass. It's been trial and error. It took me three years until I was getting the results I was looking for. The biggest myth perpetrated by agronomists in the past was that velvet doesn't need a lot of nitrogen and if you over fertilize velvet, it's a death sentence. In those first three years I had this in the back of my mind, but at the same time I knew the greens could be better. They still looked thin. It was an acceptable putting surface, but it was a struggle to keep them consistent. They would look good for a week, then go sideways, then look terrible, only to turn around and look great again. We had sound management practices and constant soil and tissue monitoring; again, all the soil labs and top agronomists had no benchmarks for what constituted an ideal range for nutrients in the greens. There was no established data anywhere. I was certainly frustrated, but I was not giving up. The course at the time was still getting great reviews, but that wasn't good enough. I felt almost ashamed of the greens – I had to get these greens to the next level. At times during this period I'd picture my industry colleagues enjoying their afternoons, laying back in a lounge chair, ice cold beer in hand watching their lovely creeping bentgrass become even more flawless, as I ran around my golf course sweating, frustrated and kneeling on the greens peering into the canopy of the grass. I'm sure the golfers must have thought that either I was praying to the turf gods or I had gone crazy.

In late 2005 I started to custom blend some fertilizers and slowly increase the nitrogen levels, completely ignoring the warnings that were so ingrained in my skull about over fertilizing velvet. As it turned out the velvet liked the extra nitrogen. It thrived, it became denser.

Cultural practices such as topdressing are a must with a dense turf like velvet in order to constantly dilute the thatch layer; however, that same dense canopy can make it next to impossible to work a topdressing

sand into. I've had to search for sand that's fine enough to incorporate into the canopy, but yet still falls within the specifications of the root zone matrix. Verticutting is an excellent tool to utilize in conjunction with topdressing in order to open that canopy up.

### What are some of the greatest challenges associated with velvet?

Where do I start? Because of its bunch-type growth and fine texture, it's extremely slow for ball marks to heal – we're talking season-long. We now incorporate mini plugs to remove the whole ball mark because we cannot sit around and wait for the recovery period. The biggest challenge is recovering from drought stress. Do not allow these greens to wilt or even approach the wilting point. The plants will not die, but all the above surface leaf tissue does and it takes two to three weeks for the plant to send up new shoots. Heaven forbid we ever host a professional event in which the tour agronomist expects us to maintain U.S. Open-style greens. They would be 100 percent brown. With mowing heights getting lower and lower and the expectations of green speed, you want to maintain them at a comfortable spot that works for both the turf and the golfer.

### Has working with velvet bentgrass been what you thought it would be?

I can honestly say yes, and then some. I knew it was going to be a challenge, and trust me it has delivered its promise. If I could hit one point home through this whole conversation it's that velvet is unpredictable. Dr. Peter Landschoot is correct when he said that velvet has fallen out of fashion. I find it very ironic that all of these new generation creeping bentgrasses are being bred to have finer texture, short internodes and a dense upright growth habit – all the characteristics of velvet. If only more research and development was put into velvet bentgrass, you could have the perfect turf species in every way. In this day and age of genetic modification, anything is possible.

### Would you characterize velvet bentgrass as "low maintenance"?

I would certainly not attach a label saying "low maintenance." It needs just as many inputs, a lot more topdressing and verticutting. If you had a very high-end private club with 15,000 rounds a year and a great maintenance budget, you could have some fantastic greens. I will say that we apply fewer fungicides than we would otherwise apply to a creeping bentgrass.

### Do you have advice for other facilities considering velvet bentgrass?

Each course must evaluate its needs, from the type of facility, the vision of the architect and the requirements of the superintendent to maintain the level of conditioning that the clients expect. I want to make a point that all turfgrass species will respond differently to the type of root zone you have – straight sand, 80/20, 70/10/20, etc. These are my observations of the trials and tribulations that I've had here. Perhaps other superintendents in different parts of the world have achieved greater success with velvet. What surprised me was the lack of sound management data out there, even after seven years of having it. I guess that's why it went by the wayside back in the 1950s when Pennncross came on the scene.