

Canadian Superintendents Report Success with T-1 Interseeding

by Doug Brede, Ph.D.



Aldo Bortolon (left) has been able to get the amount of bent on old *Poa* pushup greens at Lookout Point Country Club over 50% bent using T-1. Dennis Piccolo has interseeded not just greens at St. Catherines Golf and Country Club in southern Ontario, but approaches, collars, tees, and fairways as well. Fairways he estimates are now 70% T-1.

Years of winter damage on tiny 3000-square-foot *Poa* pushup greens is what led superintendent Aldo Bortolon to bentgrass interseeding. Bortolon has worked at Lookout Point for 35 years, the last 25 of which he has been interseeding. He's tried a number of techniques, timing, and machines to make interseeding successful, starting with the typical ½-inch hollow tines in September with 1 lb. of Penncross.

Then in 2006 after attending one of my interseeding seminars, Bortolon started using T-1 in conjunction with summer seeding. Today he seeds T-1 at 2 lbs./1000 ft², top-dressed directly behind his May and July aerification.

"Since we've been using T-1 we've noticed a remarkable difference in the bent coming through, as opposed to anything we've used in the past prior to that. It just seems like it's just that much more of an aggressive turf to do what we really want it to do," he says.

At this point he figures he's got 70 to 80% bent in areas with less compaction.

"In areas where they're continually walking on and walking off, certainly where foot traffic is predominant, there's a higher percentage of *Poa*. I'm gonna say that on the average we're 50-50 bent and *Poa*. But what I'm noticing is that every year we're increasing the percentage of bent. And in areas I never would have imagined." **Page 2**

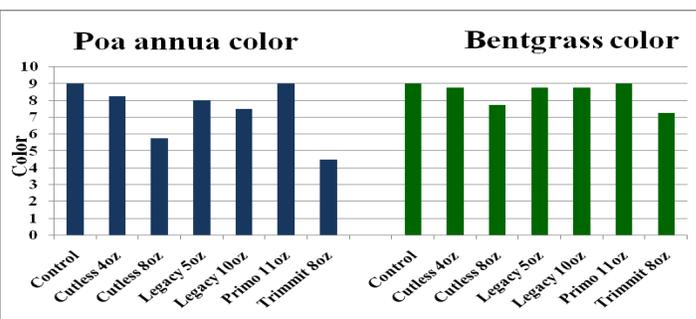
This article is a condensed version of one written by Dr. Brede that appeared in the Sept./Oct. 2009 issue of Turf & Recreation magazine.



Benefits of PGRs When Interseeding 'T-1' and 'Alpha'

by Christian Baldwin, Ph.D.

In the April 2009 *NewsFlash* and in *Golfdom's Turfgrass Trends* August 2009 edition, I summarized several studies regarding seeding rates and establishment techniques for best T-1 and Alpha interseeding success. Briefly, 12 to 14 months after a single interseeding event, approximately 68% bentgrass was achieved at Esmeralda and Downriver golf courses practice putting greens. I chose these two older courses in Spokane, WA, for my study because they were almost 100% *Poa*. In 2009, I applied a series of plant growth regulator (PGR) studies on the same putting greens with the objective of continuing to increase T-1 and Alpha bentgrass coverage while reducing *Poa annua* population. The following results focus on Downriver golf course.



PGRs were applied on May 20, 2009 and then every two weeks through September (Table 1). Percent bentgrass and color was recorded monthly. All plots were scoring a color rating of 9 prior to the first PGR application. Although *Poa annua* has a naturally lighter green color than creeping bentgrass, color was evaluated to determine if applying PGRs would lead to any discoloration.

Prior to PGR application, plots averaged 58 to 70% bentgrass. After 7 PGR applications, control plots (without a PGR) had the lowest amount of bentgrass at 52%. There was a noticeable rate effect for individual PGRs. **Page 2**

Research Summary

- Applying PGRs increased the amount of bentgrass coverage compared to untreated plots.
- Comparing PGRs, applying Primo resulted in the lowest percent bentgrass, while Trimmit applications yielded highest bentgrass coverage.
- Increasing PGR application rates increased bentgrass in plots.
- Trimmit and Cutless had a more noticeable yellowing of creeping bentgrass and *Poa annua* than Legacy and Primo.
- After 3 PGR applications, discoloration of creeping bentgrass and *Poa annua* was minimal.

Canadian superintendents, continued

Tom Brain, superintendent at Burlington Golf and Country Club in Burlington, ON, has had a similar interseeding experience. Before 2006, he would seed in September using low rates of Penncross. He waited. And not much happened.

"We never really saw a whole lot of catch," he says.

Now he's seeding in early summer with repeated applications of T-1 at 1 to 2 lbs./1000 ft². He interseeds on a 3-week regiment, starting in late May and finishing up in July. That's a total of 3 or 4 times per year when you consider dodging tournaments and the like.

"Sometimes we'll topdress afterwards and sometimes we don't," he says. "Frankly to be honest, it's more of a matter that the topdressing is going to screw up my mowers."

On greens that used to be 100% *Poa*, Brain feels he's reached at least 50-50 bent, which he's happy with. Naturally, being a shady, undulating course, there are areas with higher or lower amounts of T-1.

"There's no question that our sunniest greens are getting more bent. Which is not to say that our shady greens aren't. Interestingly, in the cleanup pass we seem to be getting quite a bit of T-1 – that typically is where you would think it would struggle the most. You'd expect with the extra compaction, that *Poa* would do better. And certainly on humps, rolls, and false fronts on our greens, bentgrass seems to be getting in better there than just about anywhere else."

"If I could get away with it I would interseed more often through the summertime. Doing it through the summer is crucial, and putting down as much seed as you can afford is too. It's made a believer out of me."

In the heart of the Niagara region, St. Catherines Golf and Country Club is a 100-year-old private course where superintendent Dennis Piccolo played host to the 2006 Ontario Ladies' Amateur Golf Championship. Piccolo credits his success in interseeding to using the right machine, the right grass, and of course, lots and lots of sand.

"I topdress first, heavily with sand, before I seed. Then when the dimple seeder goes through, I feel it is giving a bed for the seed to germinate. If you've got a lot of thatch and you just dimple seed into the turf without the ability to cover the seed, I don't think it catches well. I think sand is key," he says.

He spreads about ¼ inch of sand on fairways before topdressing 1.5 to 2 lbs. of T-1/1000 ft² using a dimple seeder. Same goes for tees and greens. After aerifying greens in mid-June with 5/8-inch hollow tines, he topdresses, applies seed, and dimples it in. Then he brushes the surface. Afterwards, he waits 5 days before resuming mowing.

"Golfers are usually mad that I just sanded the greens. They don't know that I'm letting seeds germinate."

In four seasons of interseeding, Piccolo estimates his fairways have gone from 100% *Poa* to 70% bent.

"I can definitely allow the fairways to dry up now, and I can see the bent doing better than the *Poa*. I've made my members extremely happy by being able to run the place a lot drier. They're getting these 'Superman drives' and they love it." 🏌️

"Years ago I always thought the interseeding we did was a waste of time and money," says Tom Brain, superintendent at Burlington Golf and Country Club. "Then I tried T-1..."



PGRs after interseeding, continued

Applying Cutless or Legacy at higher rates increased bentgrass coverage by approximately 14% compared to lower application rates. Comparing PGRs, Primo showed the lowest amount of bentgrass in plots (66%), while Trimmit had the highest with 83%.

All PGRs with the exception of Primo discolored creeping bentgrass and *Poa annua*. Cutless and Trimmit at the 8oz/A rate were the only PGRs that reduced the color of both species below an 8. *Poa annua* was noticeably yellowed with a color rating of 4.5 (Trimmit, 8oz/A) and 5.8 (Cutless, 8oz/A). Meanwhile, Primo applications had similar color ratings compared to control plots (untreated) for both species. At the lower application rate, Cutless and Legacy minimally reduced *Poa annua* and creeping bentgrass color. At the higher application rates, Legacy had greater color ratings than Cutless and Trimmit. After the third PGR application, discoloration was minimal, regardless of the PGR or application rate.

Conclusion

Trimmit, applied at 8oz/A, had the greatest percent creeping bentgrass in plots, however, for some superintendents, the initial discoloration of creeping bentgrass and *Poa annua* may be considered unacceptable. Legacy had slightly less bentgrass in plots compared to Trimmit; however, the bentgrass and *Poa annua* color reduction was less noticeable than the Trimmit-treated areas.

For increased bentgrass coverage, an annual seeding in early summer would continue to increase bentgrass coverage. This study will continue through 2010 in an attempt to further increase T-1 and Alpha creeping bentgrass coverage.

Creeping bentgrass vs. Poa annua comparison following 7 applications of PGR. Picture taken August 13, 2009. 🏌️



Comparison of percent T-1 and Alpha creeping bentgrass in plots before (5-20-09) and after (8-13-09) seven PGR applications at Downriver golf course. Rates (listed as first app/other apps) were reduced for the first application to avoid significant yellowing.

PGR	Rate (oz/A)	5-20-2009 % Bentgrass Coverage	8-13-2009 % Bentgrass Coverage
No PGR	0	61	58
Cutless	4/4	68	68
	6/8	73	76
Legacy	5/5	58	70
	7/10	62	81
Primo	8/11	68	66
Trimmit	6.4/8	68	83