Something New in Sports Field Restoration
IAN MILNE • COMMUNITY SERVICES • CITY OF GUELPH

Back in April of 2001, the Guelph Youth Soccer Club asked me if I could have the four mini soccer fields at Bristol Street Park regraded. The fields were getting to be in pretty rough shape – they were starting to take on the look of a mogul run. To add a little bit of history, this park is located over a 1960 era landfill site and continues to settle.

With soccer registration at an all time high, a common problem with scheduling repairs to soccer fields is deciding when to do the work and how to keep the fields in operation. We put together a plan – topdress the two better fields and keep them in play and regrade and reseed the two others as soon as the soccer season was over.

The topdressing was accomplished early in the season with no disruption to play. Now came the hard part, how to get the other two fields regraded with a good stand of turf ready for play by May 1, 2002.

I had considered reseeding, though this has worked in the past with less than ideal results. You must get the seed down early and be fortunate enough to get some moisture into the ground in the form of rain. Considering the time factor, this was a bit risky. Re-sodding the fields was a better option but with the cost of sod, the labour to put it down and Guelph's water shortage, I felt that option was out too.

I went searching for alternatives and remembered hearing Chris Morrison of Organic Express talk about Terraseeding. Chris had been looking for a site to conduct further testing of their product in a sports field situation. These two small soccer fields fit in very well for him and the timing was just right.

After some discussion with Chris, a plan was put in place. First we had the high spots scraped off and a layer of much needed good quality screened topsoil was added. This would give the turfgrass roots ample depth of soil to grow down into. With the existing topsoil and the 330 cubic yards of screened material hauled in, we had about 4-6" of topsoil, not ideal, but a great improvement over existing soil conditions. The second week of September we had the fields ready for fine grading; the soil was dry and the surface worked up very nicely. We were now ready for Chris to come in and complete the job.

On Sept. 13, Organic Express rolled in with their blower truck and started work; the job was completed the same day.

The Terraseeding material consists of a layer of compost material approximately 2 cm deep with a particle size no larger than 1 cm. The seed and the initial fertilizer are blown on with the compost and are evenly distributed throughout the 2 cm depth of compost. The compost is a weed seed free organic matter; thus, any emerging weeds would have to come from the screened topsoil or the existing soil. The seed mixture used was 50% turf type perennial rye grass and 50% turf type tall fescue. This mixture provides optimal germination, fast growth and will stand up to drought conditions.

We had five days of very dry conditions after the compost and seed was put down. This made me a little concerned, so I applied for a watering permit. This accomplished, a nearby community ice rink 1" water outlet was activated with 500' of water hose and a rain train sprinkler. One day of irrigation was all that was needed as the skies opened up and we settled into some very nice moist conditions that had the seed germinated nicely within a week.

Composted material retains significantly greater moisture than topsoil, so once the moisture is in the ground, the need for irrigation is greatly reduced. Although there was good seed germination overall, one small section at the west end of the field was a little sparse and a bit slow to germinate.

Chris was reasonably pleased with the early results but found that germination could have been more even. His company conducted some additional testing of the compost material used and found the carbon concentration to be a little high. They believed this affected seed germination and early seedling growth stage. As a result of this new information, Organic Express has corrected the carbon problem in the compost.

By early October, we had a nice seeding coverage, 5/20/20 fertilizer was applied and the weather throughout the fall was ideal for seedling growth and turf development. In fact, the turf must have looked pretty good to a group of Saturday afternoon football players who found the field and had themselves an impromptu game – needless to say, this did nothing to improve the new turf.

Snow cover has been less than ideal this winter, although the low temperatures have not been too unkind. So, it is with a great deal of anticipation that I look forward to the result of this experiment in sports field restoration in the early spring of 2002.

Due to the positive early results of this experiment, I will give consideration in the future to the Terraseeding method of topdressing sports fields during the season to keep overused fields in play.