## Sports Field Turf

aintaining healthy, lush turf is a challenge for any manager. If the turf is subject to a regular rigorous pounding by a stampede of cleated feet, the challenge becomes infinitely more difficult. Rugby, soccer, football and to a lesser extent, baseball, all take a heavy toll upon the turf on which they are played. As the caliber of the teams increase, not only does the pressure on the turf become more intense, but so too do the expectations of the turf quality by the same athletes that are out there pounding it into submission.

Professional turf managers go to great lengths to keep their sports fields in top quality shape. The higher profile the venue, the more dramatic their efforts become. Commonwealth Stadium in Edmonton is a beautiful, "real-turf" field that is home to the Edmonton Eskimo Football Team. The Eskimos play hard on their field and often play in late November, long after the turf in Commonwealth has gone dormant. To keep the field in top shape, the managers at Commonwealth overseed extensively and, every few years, they rip up



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the entire field and lay high quality sod grown from a blend of America, Alpine, Banff and Touchdown Kentucky bluegrass.

Sometimes, even the best sports turf is only meant to be temporary. A few years ago when the United States hosted the World Cup Soccer Tournament, the Silverdome in Michigan wanted to hold one of the games. Real turf had never been used in a domed stadium. In order to accomplish this feat, sod was laid on hundreds of honeycomb-shaped units on one of the parking lots outside the Silverdome. The sod was given time to set down roots and then, one by one, the honeycombs were moved into the stadium by forklift, fastened together and then given time to let the turf knit over the units. By the time the World Cup contestant teams arrived for their match, the field was in superb shape and won rave reviews from the players.

What can you, as a turf manager, do to keep your sports fields in good shape? The soil upon which you seed your field is very important. A sandy loam is quite desirable since it will facilitate drainage and resist compaction from the considerable traffic the field will eventually have to endure. Perhaps the most important aspect of creating and maintaining a quality sports field is using the best possible seed mixture that you can. An ideal mixture is one with a high proportion (50% or more) of Kentucky bluegrass. Not only is it important to use a lot of bluegrass but the varieties that you use also make a difference. At least 25% of the mixture should consist of Touchdown Kentucky bluegrass. This variety is extremely durable to high traffic and has a very aggressive spreading root system that fills in damaged and thin areas quickly. The other Kentucky bluegrass component should be a dark coloured, disease resistant variety such as Indigo or America. The rest of the mixture should include a good quality fine fescue such as Jasper Creeping Red fescue and an elite turf-type Perennial ryegrass such as Cutter or Lowgrow.

When establishing a new sports field, a good quality starter

fertilizer (ratio should be roughly 1-2-1) should be worked into the soil. The higher phosphorous component will help promote healthy root growth. Remember that, unlike nitrogen, phosphorous does not travel easily through the soil so working it into the root zone before the field is established is better than trying to spread it on after the grass has grown. Once your field is established, regular applications of a high nitrogen fertilizer will keep it healthy and lush.

As with establishment, high quality seed is a key factor in maintaining your sports field. No matter how much you fertilize and irrigate, the heavy traffic is going to wear out your turf, especially around the goal mouths and at centre field. A diligent turf manager will usually overseed twice a year—once in April or May and again in August or September. If it is at all possible,

try to coordinate your overseeding schedule with a break in play on the field. If you can give the new grass a 3-4 week reprieve from heavy traffic you will help it immeasurably. If you have more than one field, try to rotate play in such a way as to give the newly overseeded field a rest for a few weeks.

Your overseeding mixture should contain a lot of turf-type Perennial ryegrass. Ryegrass germinates and establishes fast. It blends well with bluegrass and is very durable to heavy traffic. Many managers use Futura 3000, a blend of Cutter, Edge and Express, three high performance Perennial ryegrasses. Not only do these varieties produce lush, dense turf but they are high in endophyte, a naturally occurring fungus that provides resistance to many crown feeding insects such as Chinch bugs. Alternatively, managers use Futura Blue for their overseeding. This product is a mix of Cutter Perennial ryegrass (80%) and Touchdown Kentucky bluegrass (20%). This mix still has a lot of ryegrass for rapid establishment, but it also allows you to keep the bluegrass portion of your field rejuvenated. If the field becomes too dominated with Perennial ryegrass over the years, it could be subject to some cold damage after a particularly harsh winter. By comparison, Kentucky bluegrass is far more winter-hardy.

In conclusion, remember that managing a sports field is very similar to building a successful sports team. It requires a lot of diligence and hard work and it usually works best if you start with a roster of talented, quality players.