



BMO Stadium Goes Natural

THE ONTARIO TURFGRASS INDUSTRY IS ABUZZ over the permanent conversion of BMO Stadium from synthetic to natural turf. Comprehensive articles are available in both the March and April/May 2010 issues of Turf & Recreation magazine. Photos courtesy of Zander Sod.

Winning the Turf War. Synthetic or Natural? The Discussion Continues.

Alison Brownlee, Journalism Student, Humber College

The synthetic turf of the past may have been greener than its natural predecessor, but it sure wasn't kinder. Once the pariah of all athletic surfaces, the first-generation "carpet-on-cement" turf developed in the 1960s chewed up athletes and spat them out. Sprains, tears, concussions and turf burns were the fate of soccer, rugby, baseball, football and field hockey players who dared to take on these plastic playing fields.

Since its first appearance in the Houston Astrodome in 1965, synthetic turf has come a long way. Now, even some multimillion-dollar varsity stadiums popping up across Ontario aren't being built around natural grass.

Of the 30 OCAA colleges and universities, Trent, Redeemer and Algonquin have switched to synthetic. While the remaining colleges have natural sports fields, both Cambrian and Centennial say they are considering artificial turf in the near future.

These fields are nothing like their first-generation predecessors. Professional

teams such as the Toronto Blue Jays, New England Patriots and Tampa Bay Rays use similar fourth-generation synthetics.

In 2005, Trent University took a risk and installed an artificial field; a move athletic director Bill Byrick says was the best choice he could have made for his athletes.

"Our natural grass field was pretty rough," says Byrick from his office in Peterborough. He says the worn and tired field became a safety issue. "A lot of cleats were getting stuck in the mud and after every fall late in the season, players would have cuts from the frozen dirt."

After extensive research and long conversations with the University of Ottawa and Algonquin College – two schools that already had synthetics – Trent installed a state-of-the-art plastic fiber field filled with tiny rubber pellets.

Jason Smollett, marketing manager for international artificial turf supplier FieldTurf Tarkett, says the newest versions' artificial fibers are more durable than grass, and the pellets, which are bits of cryogenically frozen tire, provide a cushion of support for athletes, lessening joint pain caused by running and falling.

Smollett says this fourth-generation synthetic turf has surpassed natural grass in safety, durability, performance and consistency.

A recent study, funded by FieldTurf and conducted by Dr. Michael C. Meyers at Montana State University, tracked 465 college-level games played on both natural and artificial fields. The study found 7% fewer injuries occurred on FieldTurf's surface, with 12% fewer concussions, 6% less lower joint trauma and 16% less ACL and associated tissue trauma.

Overall, the study found 19% fewer substantial injuries and 22% fewer severe injuries occurred when playing on the company's newest artificial turf. Nonetheless, some athletes still prefer natural grass.

During the 2010 Ontario Turfgrass Symposium at the University of Guelph, Bob Hunter of Maple Leaf Sports and Entertainment said Toronto FC's previously synthetic BMO Field will be completely refitted with natural grass for the 2010 soccer season.

"Players were complaining about it," said Hunter. "There is this perceived issue relative to wear-and-tear on the body. I think there's a recent study that came out that says it's absolutely a bunch of bull ... [But] we wanted to put in [natural grass] to bring a higher level of professionalism and credibility to our team."

He noted 13 of the 16 North American professional soccer stadiums have natural grass and several European teams, including AC Milan, refuse to play on artificial turf. The BMO field project cost about \$62.9 million and involves 82,000 square feet of natural grass.

Some OCAA players have their own reasons for choosing natural grass. David Lambden, captain of the Humber Hawks rugby team, says the variability of natural turf makes it more fun. "Every once in a while you get those rainy, stormy days when the field's just completely muddy, and in my experience, those have been some of the [most exciting] games we've ever had," says Lambden. "Part of the fun of it is the different possibilities."

Lambden also says games can be more strategic, with teams using the quirks of their natural grass home field to their advantage. With synthetic turf, though, he says a field's character disappears.

"There are no variables," says Lambden. "You don't get the dips and bounces, it's just the same."

And members of the St. Lawrence Cornwall women's soccer team say artificial turf infill can wreak havoc on performance.

As defender Joanna Buhr recalls, "Sometimes there are too many pellets in an area and your foot slips back." Fellow defender Kayla Laframboise adds the smooth surface of artificial turf can cause rolled ankles and slips when pivoting, while grass creates enough friction to pivot freely and control slides.

"And you don't get rubber in your underwear," says forward Sarah Tyrell, to a wave of laughter from her teammates.

But regardless of preconceived notions, synthetic fields are becoming more appealing for their low maintenance. The biggest barrier for OCAA facilities is cost.

Jim Galbraith, a founding member of Ontario's Sports Turf Association and the supervisor of grounds maintenance for the University of Western Ontario, says natural grass fields cost \$100,000 to \$150,000 for a soil-based field and \$250,000 to \$300,000 for a high maintenance sand-based field.

According to Frank Erle, Ontario Recreation and Facilities Association member and stadium manager at Western, building an artificial field "from scratch" costs about \$1.5 million. Resurfacing can cost around \$750,000. Erle says synthetic fields are expected to last 10 years, while Galbraith says natural fields are theoretically permanent.

"Grass fields have always been seen as the best to play on," says Galbraith. "Unfortunately, as more people play on them, they thin out and technically self-destruct when it gets really wet at the end of the season."

But both Galbraith and Erle say they appreciate a beautifully maintained natural field. "If it was pristine, there's no question you'd want to play on grass," says Erle. "But there's no guarantee you're going to get that 365 days a year."



Above. St. Lawrence Cornwall's Kim Lebrun poses on the turf field. Photo courtesy of author Alison Brownlee.

As for Trent's field, director of athletics Byrick says he expects to get 12 years out of his turf. He says it's used for varsity, campus rec and community sports and has held up through it all.

Because of Ontario's debilitating winters, the comparative maintenance costs and an increasing interest in sports, Smollett holds that artificial turf is the future – for all levels of sport.

"Whether it's here, or the other side of the world, there's no question synthetic turf is the best choice."

Reprinted from Sweat Magazine, April 15, 2010, www.sweatmag.com. Sweat magazine is an award-winning magazine produced biannually by the final year journalism class at Humber College in Toronto since 2000. The publication is student-run and written, published by the Ontario Colleges Athletic Association, and distributed to OCAA campuses all over the province.