SPORTS TURF MANAGER ... for better, safer Sports Turf

MARCH 1999

SportGrass[™] The New Playing Surface for the Future

s a sportsfield designer for the past 20 years, I am always on the lookout for new products that I can introduce to my clients. I have worked extensively with sand-based athletic fields and their drainage systems and am aware of both the pros and cons of these types of fields. Sand-based fields offer many positive features including better aeration in the root zone and rapid water movement. Unfortunately, all too often these same field types are overused and wear out fairly quickly creating an unsafe playing surface. About five years ago, when people were coming to me with stories of fields that were unsafe after 10-15 games, I investigated SportGrass™. I researched the product, contacted the company representative in Seattle, Washington, and proceeded to educate myself on what SportGrassTM is and how it works.

So, what exactly is SportGrassTM? It can be used for most sports. It is the first turf product that has combined the toughness and wear resistance of synthetic turf while still allowing play on a natural grass



For general guidelines on how to install SportsGrass[™] and more highlights from the 1999 OTS, please see pages 6-10. field. The SportGrass™ system makes use of a 100% natural grass playing surface on a layer of amended sand. Within that laver are polypropylene grass blades tufted into a woven backing. Because the grass roots grow through both the synthetic blades and the woven backing, the crown and root system of the grass plant are protected. Even if the natural grass is worn away temporarily, stability of the field is retained and play can continue. Tests have shown that SportGrass[™] playing fields can withstand more than five times the intensity of play than fields of natural grass. A well maintained SportGrass™ facility will practically eliminate ruts, divots, and bare spots, thus reducing the need not only for costly repairs and renovation, but also the potential for injury to athletes.

There has been a movement in the USA over the last several years at the collegiate and professional level to remove synthetic turf and replace it with natural grass. The overwhelming majority of athletes surveyed prefer a natural grass surface as more forgiving and believe synthetic turf is responsible for causing more injuries. In a recent survey of 935 NFL players, 85% preferred natural grass, and 93% said synthetic turf was a contributor to injuries. In addition, 70% of free agents said grass playing surfaces were an important factor in their choice of the team for whom they would play. Until the introduction of SportGrass™, many grass fields were deficient under adverse weather conditions based on playability, wear resistance, and durability. SportGrass[™] improved on all of these factors and when tested, players did not even realize they were playing on a synthetic surface. ♦

- Dan Almond (summarized by M. Bladon)

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Figure 1: A schematic drawing of the design of the sportsfield.

the pore space would then contain ice, which is not a good condition for over-wintering grass roots.

Although sand root zones may have high water conductivity values and good porosity, the drainage characteristics of the system are controlled by the drainage characteristics of the soils which surround the space where the sportsfield or golf green is constructed. Therefore, these specialized root zones must have a drainage system equal to, or superior to, that which should be used for the surrounding soil. In a nutshell, never, never build a sand-based root zone without an adequate drainage system \blacklozenge

SportGrass ™ General Guidelines Continued from page 1 ... Dan Almond

In order to increase soil porosity, a good base is required. In the profile, a minimum of 6 inches of sand base and as much as 10-12 inches is desired to drain up to 3-5 inches of rain per hour. Typically, we also want 5-15% organic matter depending on the sand we use. We then follow USGA specifications for the selection of both the sand and gravel. All of the fields we do have automatic irrigation systems installed. The foundation is 3-5 inches of gravel, then the sand base, then bluegrass sod. It is imperative that the field is graded correctly. Exhaustive testing is done to make sure we get the correct sand. There are several ways vou can lay down SportGrassTM. Rolls of the material are 12 feet wide, 150 feet long, and weigh 2,000 pounds. After laying, we topdress with about an inch of sand. SportGrass[™] is about 1-1/4 inches in height. Next we seed the grasses into the sand layer. In about 6-8 weeks, the roots are down far enough that play may begin. Standard maintenance practices are followed as far as mowing, fertility, solid tine aerating, and watering. Aerification is recommended on SportGrassTM but care must be taken that the correct size tine is used to avoid damage to the synthetic backing. Cost of a SportGrass[™] field in US dollars is approximately \$10.00/square foot.

Ransomes® AR 250 Sports Field Rotary Mower



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