Turfgrass Sod Guarantees On-Time Use And Benefits



urf managers are frequently caught in a tug-of-war. Administrators, owners and accountants insist on maximum cost control and low-bid acceptance. Coaches, players, parents and fans want first-class turf that withstands heavy play and provides maximum safety. Turfgrass sod is the solution that can satisfy everyone, especially when all of the costs for establishment, aftercare and maintenance are included in the calculations.

Establishment Costs

Yes, a pallet of sod costs more than a bag of seed, a bushel of sprigs or trays of plugs. But to create a new play area or sports field that can handle a full schedule of use in the six to eight week timeframe typically available to professional turf managers, establishment by any means other than turfgrass sod has very real, but often overlooked added costs. Even with six months lead-time, it will take at least one complete overseeding or many more sprigs or plugs to approach the density of mature turfgrass sod. Repairing washouts and areas where the seed just didn't take costs more time and money. The project is setback when time is critical. In short, establishment costs using these methods easily approach those for sodding.

Aftercare and Maintenance Costs

Many school administrators, elected officials and even professional field owners do not include aftercare and maintenance costs in their budgeting process. Turf managers know that aftercare and ongoing maintenance of seeding, sprigging or plugging jobs cost more than those of turfgrass sod. Seeded areas need more water, a major expense in many parts of the country. Also, seeded or sprigged athletic fields need more fertilizer than turfed ones for at least the first year, often longer. Seeding requires multiple applications of herbicides as well, another added cost for labor, materials and equipment wear.

These additional costs continue well into the second year of maintenance, so when you add the cost of extra water, fertilizer, herbicides and the labor involved over two years to an estimate for seeding, *turfgrass sodding actually costs less.*

Added Benefits

The real costs for seeding exceed those for turfgrass sod, it is the intangible or unmeasurable benefits of turfgrass sod that really tip the balance in sodding sports fields. Intangibles are hard to measure, but everyone involved in a sports field knows what they are.

 Most sports turf jobs have a very limited time for actual turf grow-in. The pressures of school schedules, team practices and other time limitations give turfgrass sod the advantage because it can be successfully installed in the shortest timeframe.

 Sports turf professionals value the immediate results turfgrass sod guarantees. Sod is established on time, with predictable results. Stadium owners, school boards, golf course managers and especially the players and fans recognize turfgrass sod creates a finished look and playable surface almost immediately.

• Golf course owners and players alike know that turfgrass sodding minimizes the amount of time a course is outof-play and reduces the wear and tear on maintenance equipment and golf clubs where rocks are prevalent.

• Athletes, coaches, team physicians and parents are all well aware of the improved safety offered by the dense layer of turfgrass on a newly established field with turfgrass sod. Schoolboards and park officials are all becoming more and more concerned about liability problems resulting from injuries to student athletes that could have been easily prevented.

Help Is A Call Away

Sports turf professionals can learn more about how to translate the intangible benefits of turfgrass sodding into information they can use in making presentations to various officials. Turfgrass Producers International (TPI) is prepared to provide real-world examples of turfgrass sod's cost-effectiveness and improve everyone's understanding of how a high quality, natural turf playing surface can be established at the lowest possible cost.

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-ADVERTISEMENT-



Louisville EXPO-ses Itself

By Bob Tracinski

magine having every major power equipment company from across the globe trying out its machines on your turf. And, imagine having a contingent of major turf managers examining that turf to gauge the effectiveness of the machines. Add in a few thousand more people — the buyers, dealers and distributors of such equipment, the components within them or the attachments for them. Then factor in a contingent of advertising and editorial representatives for the media — print, radio and TV.

EXPO-sing itself to such close scrutiny. and doing it year after year, is just another "opportunity" for the Grounds Branch of Louisville's Kentucky Fair and Exposition Center. Grounds Branch Manager William "Buddy" Brooks, Horticulture Section Supervisor Vickey Hypes, and Grounds Section Supervisor Tom Fitzsimmons, operate in sync like the fine-tuned machines on display to coordinate the many grounds-related details that make a major show "work." And the Outdoor Power Equipment Industries' EXPO, one of the top ten trade shows in the US, is just one event in the packed schedule of the multi-faceted complex.

The Kentucky Fair and Exposition Center racked up an impressive overall attendance of 4,164,882 during 1994. Events take place year-round, within the 1 million square feet of indoor space and the 100 acres of turf and 350 acres of paved and graveled outdoor area.

First impressions are as important for a facility as they are for an individual, and the EXPO makes a spectacular first impression. The site is so clean it almost sparkles, the turf is uniformly well maintained, and the plantings are stunning. Massive hanging baskets burst with blooms at the front entry area, and one entry walkway makes it impossible not to stop and smell the roses.

Obviously there's a well developed master plan in place here — and a highly skilled staff to implement it.

As branch manager, Brooks coordinates the overall functions of the grounds and horticulture sections, and handles the administrative tasks that pertain to the grounds. That means he does everything from monitoring the bids, specs and contracts connected to grounds construction projects to arranging for on-site transportation and drivers and overseeing the exhibitor and concessionaire set up to avoid little problems like tent poles invading the irrigation system. "If it's outside, we're involved," says Brooks. "And we handle the interior plantings and the arena set-up indoors, too." There are 19 full-time and six part-time personnel within the Grounds Branch.

Maintaining 100 Acres of Turf

The grounds section is responsible for those 100 acres of turf, including the mowing, trimming, and edging; and for turf renovation following the shows, for those 350 acres of asphalt and gravel, including maintenance and grading, for refuse collection, barns maintenance, special show lot set-ups, general maintenance on gates and sign installation. Grounds handles all minor outdoor repairs, including those to the concrete and blacktop. "We also work closely with the contractors who handle major repairs," says Fitzsimmons. "And we handle the equipment maintenance."

The horticulture section responsibilities include installation and maintenance of all ornamental plantings, interior plants and plantscaping for shows, fountain maintenance, all chemical applications inside and outside the buildings,



The Kentucky Fair and Exposition Center, with one million square feet of indoor space, 100 acres of turf and 350 acres of paved and graveled outdoor area, makes a spectacular first impression.

maintenance of the sports practice fields and the irrigation systems. "We also maintain two greenhouses and grow approximately 35,000 annuals and perennials for on-site use each year," says Hypes. "And we maintain the All America Rose Society (AARS) garden including its 2,500 roses. This garden was judged the number one public display garden in the US in 1993."

The Exposition Center has undergone a series of expansions, the most recent, the addition of the south wing. A paved "Ring Road," completed in June 1994, now encircles the grounds, making traffic flow more efficient. This road extended the useable portion of outside grounds and entailed the removal of several homes. Brooks defined the construction-grade "fill dirt" brought in for the upper soil level as 90 percent rock, ten percent dirt.

Hypes said, "After the homes were cleared and the soil brought in, we removed 22 dump truck loads of concrete, rocks and other solid debris. In the process, we discovered six wells, approximately four feet by four feet by 30 feet. We filled them with rock too. We wanted to end up with a six-inch top layer of rockfree soil. We rented rock hounds, power rakes and spent days picking up rocks by hand. We even put some prisoners on pick-up duty for a couple days."

The Kentucky Derby is Louisville's premier event, and it seems that all public "space" becomes involved in part of the celebration. During the annual Derby Festival Week, the EXPO grounds hosts a Great Balloon Festival. The demo area is filled with hot air balloons, their crews and support equipment, and the public.



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Demo Lot Renovation

Hypes says, "The outside demo lot is 19.56 acres, and eight acres of that were totally renovated this past year. Renovation began immediately following the Balloon Festival in 1995. Our total window extended from that first weekend in May to the EXPO '95 move-in at the end of July. We called on Dr. A.J. Powell of the University of Kentucky to advise us throughout this renovation — and he's been terrific."

Following Dr. Powell's recommendations, the staff had eight loads of "good" soil brought in to augment the existing fill dirt, then tilled the entire eight acres. With no in-ground irrigation system, they delayed the broadcast seeding of Mirage, a variety of seeded bermudagrass from International Seed, until mid-May to coincide with natural rainfall.

But within a few days of seeding, heavy rains deluged the area, washing out much of the seed and leaving a network of ruts. Hypes commends International Seed for its assistance, but it still took time Grounds Branch Manager William "Buddy" Brooks (left) and Horticulture Section Supervisor Vickey Hypes are two of the primary people responsible for grounds maintenance at the Kentucky Fair and Exposition Center in Louisville.



to track down enough Mirage to reseed the area, and by May 31, when the second application was made, the staff was "battling time." Another series of driving rains hit the site, again requiring major repair. When the rains finally ended, extreme high temperatures set in.

"We had to apply water continuously for several weeks prior to the show," said Hypes. "And all we had for irrigation was a portable Wade Rain system. This had to be moved two to three times each day to cover the area. We had to allow an hour or two after each irrigation cycle for the surface to dry sufficiently to move the system without tearing out the seedlings. We pushed the new seed with weekly applications of urea and still needed to spot seed with annual ryegrass in a few spots. And, because some of the original seeding came up in the flat areas, we were spot mowing there.

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"The established turf was easier. We test the soil each spring and base the fertilization program on the test results. We'd applied 10-10-10 fertilizer in the fall of 1994 at the rate of 250 pounds per acre, and the grass came through the winter in good shape. We aerified, resoded in some weak areas and, because drainage is a continuing problem due to runoff from Highway I-65, reseeded all the ditch lines. We made two applications of MSMA to combat grassy weeds and treated a few patches of clover."

Weather wasn't kind to EXPO turf. Hypes says, "We had a hard winter with snowfall and extreme temperatures. Unfortunately, we experienced the severe cold with no snow cover. The Mirage bermudagrass was really put to the test. Unfortunately, we lost about 85 to 90 percent of our stand.



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"We had to re-seed the entire eight acres we had in Mirage this past spring. We had over nine inches of rain in the month of May — three inches is the normal average. We have some germination now, and we are trying to push what little we had retained with biweekly applications of ammonia nitrate. We're hoping, with all the rainfall, our bermuda seed won't be germinating along the banks of the Ohio."

Compaction is a major problem in the demo area because it's used for vehicle parking most weekends, for the North American Livestock Show in November, for the stock dog trials and for RVs, as well as the Fair, EXPO and Balloon Festival. The staff also contends with the ruts left by vehicles during wet weather.

Each year, special events related to the State Fair begin moving in as EXPO moves out. For EXPO '95, move out came on August first, and the main Fair set-up started August seventh. With all this going on and the demo lot a prime site for parking, crews have little time to spruce up the turf. Hypes says, "We'll aerify the drive lanes and heavily used booth areas, but overall, the lot appears to be in pretty good shape."

Another part of the complex, Cardinal Stadium, is the home of the Triple A Louisville Redbirds baseball team and the football team of the University of Louisville. The stadium field is artificial turf, but just outside the stadium walls lie the University of Louisville practice fields. There are two complete fields with goal posts, one for offense, one for defense; an additional field, 1 1/2 times normal length, with no goal posts; and a "sled" area. In addition, there's a large outlying section of turf under the same maintenance practices that serves as a "sod nursery." Practices begin in early August and extend as far into November "as the team keeps winning."

The practice fields were originally Midiron bermudagrass, but after significant winter kill in 1994, they have been resprigged with Quickstand bermudagrass. This is overseeded with a blend of perennial ryegrasses when temperatures cool. These fields have an inground irrigation system.

Besides the practices, the fields are used for occasional clinics and camps, and the tailgaters. Hypes says, "On game days, 15,000 people, 20 vendor tents and numerous trucks move onto the long field. We aerify that section three to four times more than the other fields. But