State of the Industry, Part I: Grappling with Growth

By Bill Steele

Likewise, the sports turf industry is upgrading its surfaces from the ground up and reshaping the contours of its profession. Enhanced communication, education, and technology has helped sport turf managers greatly advance the safety, performance, and aesthetics of sports fields at the same time that the public has come to appreciate the value of good playing surfaces. A new crop of degreed, hungry young people entering the trade has elevated the status of sports turf managers to the point where professionalism on par with the golf course superintendent is palpable for many in the industry.

These are promising times indeed for the sports turf manager and the nation's estimated $11 billion athletic fields industry. "Sports turf is changing so there's a lot of buzz in the industry," says Andy McNitt, associate professor of soil science/turfgrass at Penn State. "In the last 10 or 15 years what's happened to this industry is pretty remarkable."

To examine what has been happening, Sports Turf recently contacted more than 25 sports turf managers, manufacturers, suppliers, and other experts to discuss important trends and issues facing the profession, from compensation and certification to synthetic turf and water management. The result is a revealing snapshot of this sprawling, fast-moving industry.

Growing pains

By evidence of numbers alone, the sports turf industry today arguably is larger than golf in the overall U.S. turf and ornamental market. Although the golf industry spends an estimated six times more dollars per acre than sports turf, sports turf managers and other groundskeepers collectively maintain far more acreage. Based on 2005 figures provided by Penn State, for example, a total of seven million acres of turf (both natural grass and synthetic) is maintained by the sports field industry in the United States versus golf's estimated 1.7 million. That's more total land area than the state of Maryland.

Of course, the veracity of these kinds of figures is endlessly debatable. Depending on source and methodology, the picture can look far different. Case in point: a random survey of 75 sports turf managers taken last year by New Jersey-based Specialty Products Consulting, which analyzes the turf and ornamental market for chemical companies such as...
as Dow AgroSciences and Syngenta, found an average of 78.1 acres of turf supervised at each manager’s facility. Multiply that by the estimated 30,000 athletic facilities across the country, including parks and recreation, and you get 2.3 million maintained acres. Looking only at turf maintained by members of the Sports Turf Managers Association (STMA), the number drops to roughly 185,000 acres.

But regardless of accounting, most industry observers agree that the athletic turf industry is expanding at a time when housing is down and golf remains flat. Though no hard numbers are available to verify this consensus, anecdotal support abounds.

“It seems like every midsize town in the country is putting in a recreational complex of some kind,” says Mike Andresen, CSFM, facilities and grounds manager for Iowa State Athletics and current STMA President. Andresen said that Iowa State is currently spending $20 million renovating the university’s Jack Trice Stadium, a natural grass facility, and adds that he sees many high schools improving their fields. Overall, sports turf managers are being handed better resources to manage than ever before, he said, and administrators are “starting to understand that it takes equipment and talented people to manage those facilities. I don’t think this is happening just on the university level—it cuts clear across the board, from the park and recs to the professional level.”

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—Dr. Hank Wilkinson, Turfgrass Pathologist at the University of Illinois at Urbana-Champaign.

One reason why administrators are more interested in the quality of sports turf is that they need to get more use out of their facilities, says Dr. Hank Wilkinson, a University of Illinois turfgrass pathologist and sports field consultant.

“What’s really driving the industry, from top to bottom, for better quality of surface and better management, is multiple use,” said Wilkinson, who advised work on Wrigley Field’s renovation last fall. “People want sports fields that they can use use use use use use use, and the quality remains the same.”

Wilkinson contends that most administrators, however, don’t understand that a strong management program is required for a natural sports field to hold up to the demands of multiple venues. Largely because of that, he says, artificial turf is viewed as the way to go instead.

“The mentality of ‘mow it and fertilize it and water it,’ they can’t understand why they need to go beyond that,” Wilkinson said. “Instead of investing in management and maintenance, they give up the ghost right away and say we have poor managers, we have poor maintenance, so we’ll get artificial and everybody can run a rug sweeper. So I see that’s the main reason why artificials in the sports world are getting in.”

Synthetics pile on

Looking back, the rebirth of artificials was difficult for many sports turf managers to foresee. Ten years ago, when improved 3rd generation synthetic rubber infills first began hitting the market, natural turf managers were happily dancing on the grave of Astroturf, thinking they had won the war over synthetics.

They were wrong.

Thanks to improved technology, artificial turf has regrouped and made a counterattack. The Synthetic Turf Council, a non-profit advocacy group based in Atlanta, estimates that between 3,000 to 3,500 fields have been installed nationwide since 1998, and growth in recent years has been logarithmic. The latest figures available show that full-size (greater than 60,000 square feet) installations of synthetic turf for athletic fields in the U.S. increased approximately 100 percent from 2003 to 2005, from roughly 400 installations in 2003 to about 800 in 2005. Two-thirds of NFL teams play or can practice now on synthetic rubber infill and even Ohio State and Rutgers, well known for their turfgrass research, have synthetic turf on their football fields.

Chad Price, President of Carolina Green, a sports turf contractor in Indian Trail, N.C., says that his company is installing more and more synthetics every year, and is starting to see school districts order them. “It’s gone from a situation where only a few would have it, to now where it’s really being considered in a lot more situations,” he said.

Chad Price, Carolina Green Corp.
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—Chad Price, President, Carolina Green in Indian Trail, N.C.

One explanation for the sudden popularity of synthetic turf at the high school level is that it has become a status symbol, a way of keeping up with the Centrals. Explains Penn State’s McNitt: “What it is, it’s like, hey, Central is a big high school football power, and we emulate to be as good as them. They put in synthetic turf, wow, they’re a serious program. If we’re going to be a serious program, we need synthetic turf as well.”

McNitt finds it ironic how a high school that isn’t able to find $7,000 to improve their grass field will suddenly find $700,000 to build a synthetic field. “It’s unbelievable,” he said. “I work with a lot of high schools and it’s crazy to me.”

The synthetic turf craze is troubling for people like Dave Ames, a sports turf consultant based in Vancouver, Wash., who sees pitfalls with the majority of the crumb rubber infill-based systems that are being aggressively marketed to municipalities and school boards. In addition to longstanding issues related to heat buildup, sterilization, and long-term durability, the cost of removing rubber come replacement time is “a bomb waiting to go off,” he said.

“The industry has moved so fast with rubber infills, they haven’t had a cycle of replacement,” Ames said. “I honestly believe it’s going to cost more to replace these football and softball fields than it did to originally install them.”

He added, “These manufacturers are promising the world, but I see a lot of problems coming.”

Synthetic turf manufacturers contacted for this article acknowledged that rubber infill fields first installed in the late 1990s are just now coming up on their 8-year warranties but say that so far they have encountered no “life span” or replacement issues. They insist that a host of new and emerging technologies for disposal, such as
those that convert rubber into fuel, will allow for cost-effective, environmentally friendly disposal of old artificial sports fields.

How the conversion back to rubber fill will affect the industry is unknown, but for the moment, the consensus among many in the profession is that synthetics are quite useful in certain applications and areas of the country.

"It's one more tool in the toolbox," says Dave Minner, professor of horticulture at Iowa State and a former STMA Board member. Minner points out that in nearly every case he's seen synthetics are being used in a complex, not just one field, and "once you get a synthetic field into that complex, most all your other [natural turf] fields improve."

Steve Wightman, CSFM, sports turf manager for the San Diego Chargers, agrees. Although he acknowledges some reservations about synthetic turf, he does not view their widespread use as the death knell for natural turf or the demise of the sports turf manager.

"From my perspective, it's not us and them; it's not natural grass and synthetic," Wightman said. "We're all part of the same industry, and we all have our unique challenges, even synthetic. I see our industry growing maybe more so in another direction than it had been, but we're all part of the same industry and it brings unique challenges. There's still going to be natural grass out there and people are going want to play on it. I don't see that going away. Maybe your game field or practice field is not natural grass; doesn't mean that it's bad for the industry."

"We use them as a tool to make our grass fields look better," said Waldo Terrell, sports turf manager for the University of Georgia. Terrell oversees two multi-use artificial fields in a facilities complex that encompasses 17 acres of hybrid bermudagrass. Last year, they helped him survive what every manager dreads: "No Water."

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—Dave Ames, Sports Turf Consultant, Denver, Colo.

Water woes

According to the STMA, among the 10 most important issues affecting the sports turf management profession, such as labor, advancing technology, and environmental restrictions, water quality and availability is ranked number one. And as the nation's growing population continues to tax water systems, particularly in the Sunbelt, it is an issue likely to dog the industry for years to come.

In Georgia, as well as many other southeastern states, ongoing drought conditions have already prodded sports turf managers to take drastic measures. For Waldo Terrell, that happened when Athens-Clarke County banned outdoor watering in September, at the height of Georgia's football season. Terrell's short-term solution was to rent a tanker truck and pull water out of a retention pond off campus in order to keep his stadium grass alive. In the meantime, he let his other fields go dormant. The football teams used the synthetic fields for practice.

"That helped a ton," Terrell said.

Eventually, Terrell secured a well that will allow the university to water most of its fields next season without impacting municipal systems. His take-home message to sports turf managers: "Find a water source you control," he said.

Terrell also advises that managers formulate best management practices and maintain good records to prove to local and state water authorities they are conserving water. The golf industry is a model to follow in this regard, he said.

During a similar drought situation in 2002, the Georgia Golf Course Superintendents Association proactively lobbied for water use leniency as the State legislature was drafting new water rules. Consequently, golf courses in Georgia today enjoy exemptions that the sports turf industry does not.

"The golf course guys were really on the ball with this, whereas our industry, the sports turf guys, really missed the boat," Terrell said.

Carolina Green's Chad Price agrees, and says that the sports turf industry should also proactively address the public and show them that healthy turf is good business, as the golf course industry has successfully done. "They've politicked their way into that, and that's what the sports turf community's going to have to do or we're going to be left out in the cold," he said. ■

William Steele is a freelance writer living in Lawrence, KS. The second part of this series will appear in the March issue.