

State of the Industry, Part I: Grappling with Growth

By Bill Steele

In many ways, today's sports turf story can be written with a handful of dirt.

Once an unmanaged, hard-as-concrete area on most athletic fields, dirt is now lovingly cared for, treated with soil conditioners and other fancy

additives, and studied by soil scientists at top universities. Over the last decade, good dirt and soil management techniques have filtered down from the professional to the recreational sports level, and sales of related products and services have grown significantly.

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, *SportsTurf* 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



Dr. Andy McNitt, Penn State

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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."

"What's really driving the industry, from top to bottom, for better quality of surface and better management, is multiple use."

—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, 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

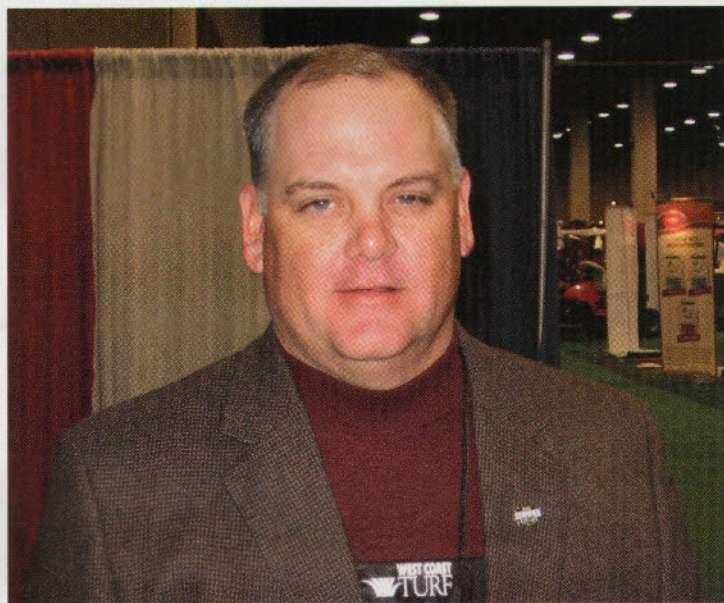
of investing in management and maintenance, they give up the ghost right away and say we have poor managers, we have poor maintenance, so we'll get artificial and everybody can run a rug sweeper. So I see that's the main reason why artificials in the sports world are getting in."

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, Carolina Green Corp.

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.

"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."

—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

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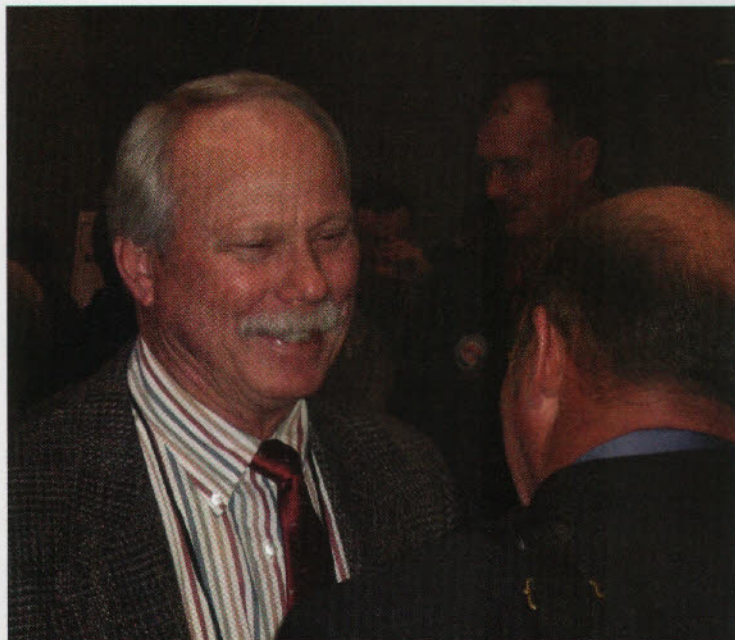
those that convert rubber into fuel, will allow for cost-effective, environmentally friendly disposal of old artificial sports fields.

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



Steve Wightman, Qualcomm Stadium, San Diego

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."

"They're promising the world, but I see a lot of problems coming."

**—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.

Wildfire evacuees find refuge at Qualcomm Stadium

By Steve Wightman



Monday, October 22, 2007 started off like any other Monday following weekend football. Arriving to work at 5:30 AM, I began reviewing the day's work schedules for repairing the playing field and cleaning the stadium in preparation for next weekend's football double-header with San Diego State and the Chargers. On my way I had noticed a different sky, one that was not normal this time of year; soon I'd discover that this particular Monday was to be like no other.

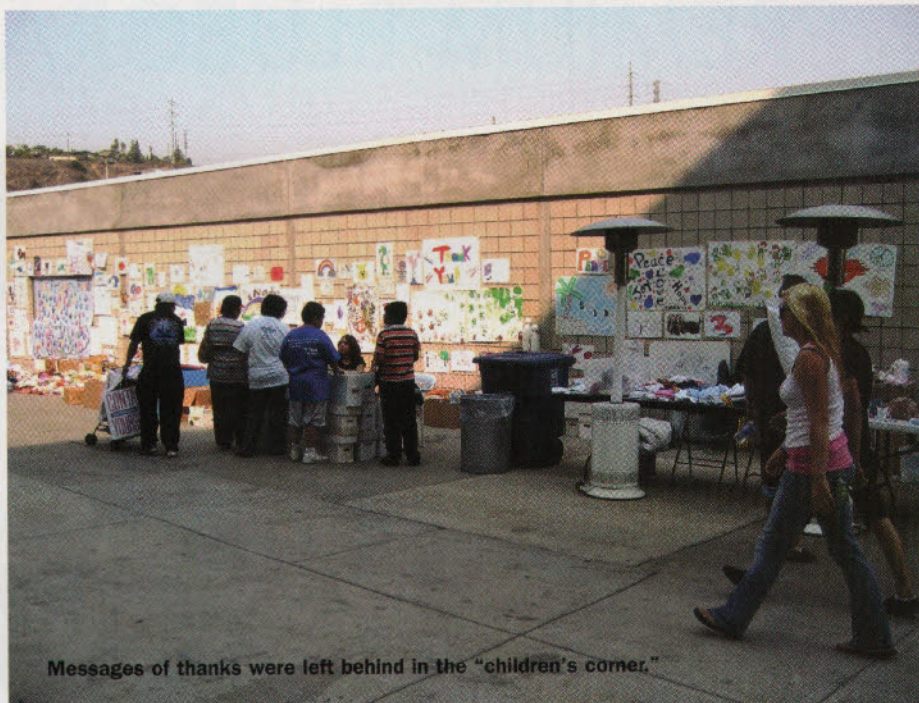
The old Charger practice field became the animal shelter for the hundreds of evacuated pets.

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While most of us slept Sunday night the entire eastern edge of San Diego County was being engulfed by wildfires that were being fanned by the seasonably common Santa Ana winds. Typically, southern California's weather is tempered by prevailing winds that blow easterly from the Pacific Ocean to the inland valleys, distant mountains, and warm deserts. During Santa Ana's however, the wind direction is reversed and brings very gusty westerly winds dominated by the warm temperatures and very dry conditions of the desert regions. The temperatures are welcome yet feared because of the potential for destruction.

While going through my email suddenly a message from the mayor's office came stating that people were being evacuated because of the fires and that the evacuation site was Qualcomm Stadium.

What was a sports stadium just a few minutes earlier was to become a refuge for the young, the old, families, neighbors, pets, and every conceivable possession that people might hastily grab on the way out the door. The first evacuees began arriving at the sta-



Messages of thanks were left behind in the "children's corner."

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dium around 8 AM. At first the traffic was not much more than a trickle into the 150 acres of asphalt parking lots that surround the stadium, but by nightfall the 20,000 parking spaces were about a third occupied by cars, trucks, vans, motor-homes, horse trailers, tents, and sleeping bags.

We began implementing the Emergency Operations Plan (EOP) that, in part, included contacting companies currently servicing the stadium for additional items, supplies, and services. It soon became apparent that much more was going to be needed as the parking area became even more congested and the fires continued raging toward the Pacific.

Numerous other city departments, agencies and military forces sprung into action and added resources to a well developed and seamless execution of the city's Emergency Plan. For example, Parks and Recreation provided trucks, forklifts and personnel to assist with the flood of donated food, clothing and supplies channeled through a "distribution center" setup in the far portion of one of the parking lots.

The old Charger practice field, located in the far corner of the stadium complex, and now used for rugby, soccer, tailgate parties and overflow parking, became the animal shelter for the hundreds of pets of those evacuated. Animals ranged from the dogs and cats to birds, horses, cows, goats, snakes, gerbils, and mice.

Complete with veterinarians, nurses, and throngs of volunteers, all animals were meticulously screened and cared for. To help with the effort the grounds crew setup a watering area for the horses and larger animals and cleaned out some of the nearby open storage bins which became crude animal pens.

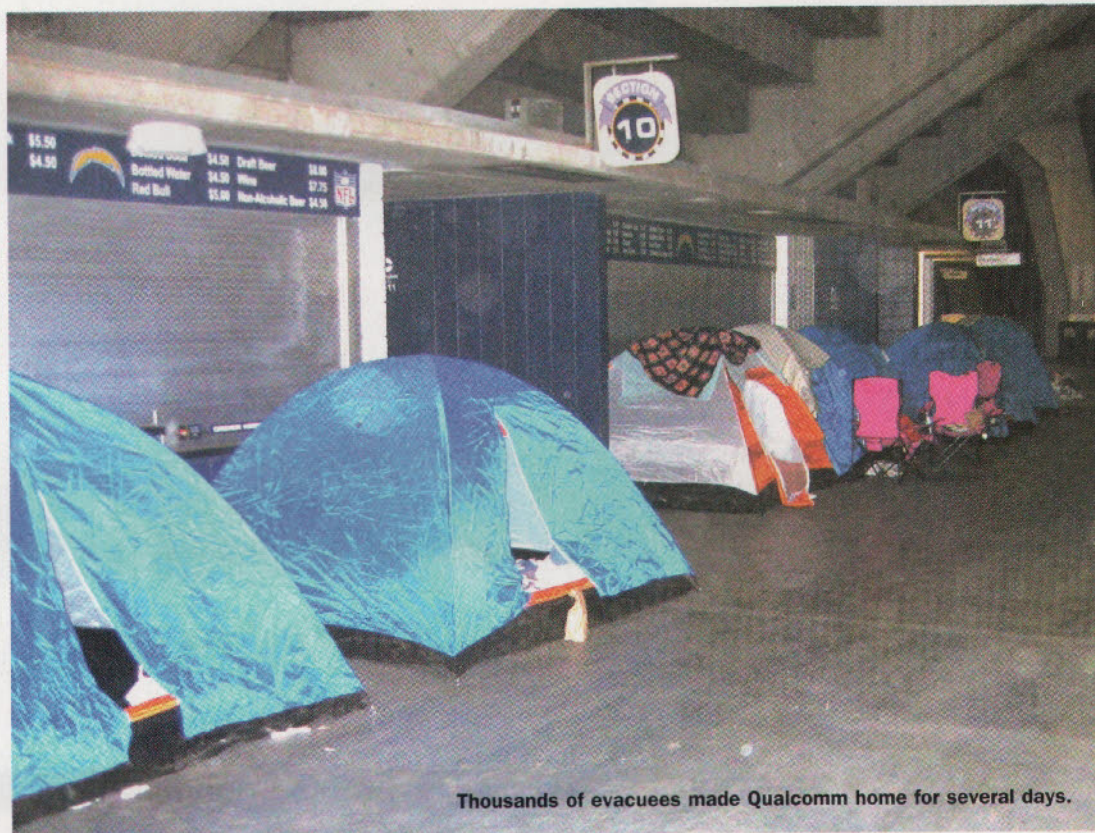
When the evacuations began it was envisioned that all would be confined to the parking areas. However, it became evident early on when more and more people arrived at what was now the main evacuation center for the entire county of San Diego that we were going to have to open up the stadium to properly accommodate all of those who were now entrusted to our care.

Since we were still in the middle of our football season it was decided that all evacuees who came into the stadium would be confined to the seating areas and concourses only leaving the playing field, locker rooms, private suites, and restaurants off limits.

When the gates were opened each person was to be documented for emergency purposes; however, this exercise disappeared when a major logjam quickly formed. So the gates were simply opened up allowing a free-flow of people into the stadium under a somewhat watchful eye of security personnel. It was hoped that the people would conduct them-

selves differently than our normal football crowd. I'm certain that the fact that no alcohol was allowed greatly contributed to that success.

As Monday turned into Tuesday and Tuesday into Wednesday donations of all kinds continued to pour in to the point of exceeding the needs of those housed at the stadium. The distribution center then began to transport the excess donations to other evacuation centers within the city. The number of evacuees now residing within the stadium totaled nearly 10,000. During those first three days many of the evacuees found more comfortable quarters with family, friends and hotel rooms after their initial arrival. Those that left were being replaced by



Thousands of evacuees made Qualcomm home for several days.

new evacuees as the fires continued to rage westward.

The Field concourse became "tent city" with tents covering nearly every square foot and filled mostly with families. Some tents contained giggly children with the tent next door occupied by the concerned and somber parents. Other tents were spread throughout the upper levels and congregated in every conceivable nook and cranny. Most however, were located in areas where restrooms were but a few steps away. Some adventurous souls took up residence on the penthouse level with the moon and stars obscured by the smoke and ash of the fires.

Shower trailers were brought in and setup in one of the parking lots and became a much welcomed spot for those many evacuees who had been camped out since the first day. Portable heaters were spread throughout the main concourse to provide some warmth to the exhausted and worried stadium crowd.

With each passing day we all became more experienced in our new roles. City department directors worked along side custodians in assist-

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ing in any way necessary to make the hours of the evacuees pass a little faster and a little easier. Local schools and PTA organizations created a "children's corner" that provided games and educational tools to the throngs of children many of whom did not understand why they were still there sleeping in the seats and concourses of the stadium.

Many of the 800 TVs inside the stadium were turned on early in the week to provide evacuees with constant updated fire and evacuation information. At 5PM every night the Jumbotron scoreboard became the children's theater featuring various Disney movies in hopes of providing the children and their parents a little bit of relief from their anxieties.

On Thursday the media began relating the much-awaited news that the authorities were allowing families of some of the communities to return to their homes. Joy and jubilation reverberated throughout the stadium with each mentioned community. And, the numbers within the stadium slowly began to

diminish much like the 4th quarter when a game is well in hand.

By noon Friday all of the evacuees were gone and the focus was back to getting ready for the Charger game on Sunday. The poor air quality the fires brought to the city prevented San Diego State from practicing and their Saturday game with BYU was postponed. The Chargers had moved to Phoenix that week for their practices and it was decided the game on Sunday would indeed be played at Qualcomm.

The exhausted stadium staff began the long task of cleaning up and getting ready for the game. The grounds crew began painting the football field and the custodial staff began cleaning the stadium, which included washing off the ash from the fires in the seating areas, concourses and sidewalks. The cleanup and preparation efforts would not be fully completed until early Sunday morning.

Personally, this experience was very touching in many ways. It showed me those things

that matter most in life—family and friends. The faces of those last elderly evacuees that were wheeled out of the stadium on Friday showed me the true meaning of determination in getting through difficult times. The chalk marks on the concrete, posters hung on the walls, stick figures, funny faces, words of wisdom and messages of thanks left behind in the "children's corner" left a lasting impression on me, as well, that our youth can teach us volumes about resiliency.

For the Charger game we left the "children's corner" as they left it to us, a small yet powerful memory of the devastating fires and a tribute to a community that came together. It was a reminder left for Charger fans that Sunday, many of whom had spent time earlier that week inside the stadium. ■

Steve Wightman is stadium/field manager for Qualcomm Stadium in San Diego.

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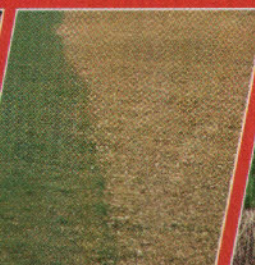
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