CHALKBOARD

Coach Knows Practice Fields

oach Howard Schnellenberger is used to winning. He knows what it takes, including the need for championship level football practice fields.

Schnellenberger has been associated with championship football since beginning his career at his alma mater, the University of Kentucky, as an assistant to Blanton Collier in 1959. Next, he spent five years as assistant to Bear Bryant at the University of Alabama. During that period, Alabama won three national championships and four bowl games.

He spent several years with the Los Angeles Rams, with Don Schula and the Miami Dolphins when they went undefeated and won the world championship in 1972, and as head coach of the Baltimore Colts in the 1970s.

Returning to college coaching, he led the University of Miami Hurricanes to the national championship with a onepoint win over Nebraska in 1983. In 1985, Coach Schnellenberger returned to his hometown of Louisville to take over the struggling football program at the University of Louisville.

When he came to Louisville, the university did not have a practice site. Building one was one of his first priorities.

"We carved out 14 acres next to a parking lot here at the fairgrounds," says Schnellenberger. "We had to bull-doze down some cattle pens, take out some trees, even blast out some rock."

Cardinal Stadium, where the University of Louisville plays its home games, is located on the grounds of the Kentucky Fair and Exposition Center, a 425-acre site six miles from downtown Louisville. Renovated in 1982, Cardinal Stadium is also home to baseball's Louisville Cardinals, a major farm team of the St. Louis Cardinals. For football, the stadium seats 35,000 people.

With the main University of Louisville campus only about two miles away, and



Coach Howard Schnellenberger (right) and Tieco's Grady Stone.

space available on the grounds, it made sense to locate the practice fields at the Exposition Center.

"We put in two top-of-the-line full size practice fields, each with an 18-inch crown in the center and french drains along the sides," Schnellenberger says. An additional 180-yard field also was put in, where offensive and defensive backs can practice running their routes.

"We put the entire 15-acre site under sprinklers, then sprigged-in Midiron Bermudagrass," the coach says. "This is about as far north as Midiron will grow, so it's been a tedious process. Bermudagrass goes dormant after the first frost, usually in November, so in October we overseed the fields with perennial ryegrass. That gives us a green field through the season and on through the year. In winter, we blow straw onto the field to bed it down' and give it some protection."

The practice fields get a lot of wear and tear, not only from spring football and the fall season. Coach Schnellenberger and his staff host a youth football camp during the summer. And, during the six home football games, the practice fields are used for a "tailgate" area.

"We get tents on them, trucks driving on them, thousands of people tramping around on the practice fields. At least one irrigation line gets broken every home football game. Somebody manages to drive a tent stake into one." Keeping his practice field in top shape takes patience, along with plenty of top-dressing and a good aeration program, Schnellenberger says. "Bermuda loves sandy soil—but we have heavy clay here, so we're forever putting more sand on the fields. Because the heaviest wear and tear during practice is between the hashmarks, we have to keep adding sand to maintain the center crown."

In past years, groundskeepers aerated the practice fields twice, in spring and fall. This season, Coach Schnellenberger worked out a special service arrangement with local Cushman dealer, Tieco, Inc. to aerate the practice fields at least three times, and more if needed.

"With their new GA 60 Aerator, we can aerate the practice fields in four to six hours," Schnellenberger says.

"Before, it took at least four days and sometimes longer to get over the fields. It will allow us to aerate as often as needed.

"We plan to aerate at least three times during the year, but we'll do it an extra time or two if necessary. With the soil we have and the wear and tear the fields get, I don't think eight times would be too much."

Aerating and topdressing go hand in hand on the practice fields. Besides helping the bermudagrass grow healthier for a better playing surface, the aeration holes provide extra area for the topdressing to infiltrate the turf.

"It's a personal goal of mine to have the best practice fields north of the Florida state line," says Schnellenberger.

"I'm out there just about every day making sure they are kept in shape. The beauty of it is, the fields have gotten better every year, in spite of the tough conditions."

Like his practice fields, Coach Schnellenberger's University of Louisville Fighting Cardinals keep getting better too. They finished with a 10-1-1 record in 1990, beat Alabama 34-7 in the 1991 Fiesta Bowl, and wound up 12th in the final national collegiate rankings.

Cypress Golf Club

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in Arizona and five acres in Oklahoma. The company is taking bookings from developers hoping to use 609 on projects in 1992. Doguet said 1993 will be the year when 609 will be more widely available.

What attracted Dye to Prairie was its low growth habit. Prairie grows about 5-to 6-inches high and stops growing, said Doguet. Dye figured he could plant Prairie on his mounded areas and drastically reduce mowing, fertilizer and water requirements, Buzbee said.

Dye specified Prairie for 42 of the course's 105 acres. "This is probably the biggest [buffalograss] golf project in the country," said Doguet.

Installing Buffalograss

Installing that much buffalograss sod in California was not without its own set of challenges. West Coast Turf, Palm Desert, CA, supplied some of the Prairie sod through its sublicensing agreement with Crenshaw & Doguet Turfgrass. However, the bulk of the sod had to come from Texas.

When sodding is complete in February 1992, more than 100 refrigerated truckloads of sod will have made the trek No other golf course in California has as much buffalograss as Cypress Golf Club, so everyone is learning about how to best maintain the turf.

from Texas to California, Doguet said. The initial shipments were held up by the California Department of Agriculture for testing. Once the sod passed tests and the permitting was in place, the shipments flowed freely.

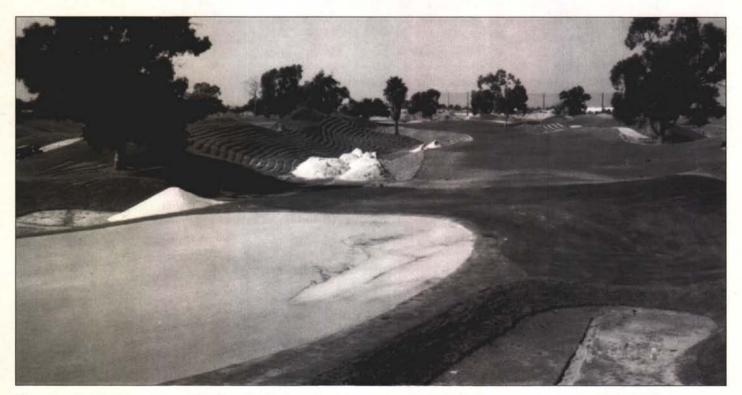
Installers solid-sodded the steepest mounds to help prevent erosion. On the remainder of the rough sections, crews strip sodded every other row. Buffalograss sends out runners, causing it to creep. Andreasen hopes the strip sodded areas will grow together by the summer of 1992. The buffalograss thrived on neglect, Andreasen said. Some freshly sodded sections sat for as long as three days without water. They established as well as sod that was immediately watered in, Andreasen said.

In general, Andreasen tried to irrigate the freshly sodded buffalograss daily for the first few weeks. Then, he backed off irrigation to about 0.15-inch of water twice a week. He found that all the buffalograss turned brown immediately after it was installed. However, he said it started to root even before the turf greened up.

The buffalograss likes dry conditions, Andreasen said. "The drier it was, the more runners it sent out. The less you did to it, the better off it was."

Bringing in sod by refrigerated trucks greatly increased the course's construction costs. Mike Matsuda, secretary-director of FJC USA, Inc., stayed with the decision to plant buffalograss despite the extra costs because FJC wanted to build an innovative course that set a good example for water use, Buzbee said.

"One of the advantages of the buffalograss is that we can regulate its growth," Andreasen said. By controlling the amount of fertilizer and water



View from behind fourth green looking back toward tee. Bermudagrass sod in front of green and stolons on fairway. Photo courtesy: Kajima.

he applies, Andreasen hopes to be able to keep the turf growing slowly but acceptably green.

Maintenance Considerations

No other golf course in California has as much buffalograss as Cypress Golf Club, so everyone is learning about how to best maintain the turf. In general, buffalograss likes little water and fertilizer. "There are very few people who can tell us exactly what to do," said Buzbee.

The course is about five miles from the Pacific Ocean, so temperatures are moderate all year. Andreasen will wait and see how high the buffalograss will grow in the moderate weather. He hopes to limit mowings to once a month with a combination of Flymos and triplex reel mowers.

Accenting the roughs, the fairways were planted with Tifway II. Tees and aprons are 328 bermudagrass. The greens were seeded with Seed Research 1020, a new bentgrass variety with good drought tolerance.

In order the achieve maximum water



Strip-sodded buffalograss surrounds 12th tee. Photo courtesy: Kajima.

conservation, the course needed a different kind of irrigation system. The fairways and roughs had drastically different irrigation needs, so full-circle heads at

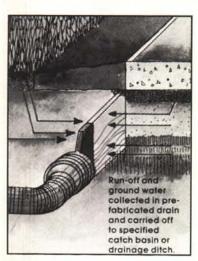
fairway edges couldn't deliver the correct amount of water to both grasses.

The solution was to install a series of part-circle heads along the edges of the

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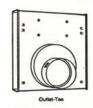
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Cypress Golf Club

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roughs and fairways. The irrigation designer grouped the heads so bermudagrass areas were isolated from buffalograss areas. In all, the course has more than 2,500 sprinklers, mainly Rain Bird sprinklers with some Hunter high popups.

The wild look of the buffalograss accents the manicured fairways and greens.

A Rain Bird Maxi V central control system tracks and controls the irrigation system. Mike Duszynski, assistant golf course superintendent, was hired primarily to manage the course irrigation system. He is currently developing an irrigation regime for the post-grow-in period. He says only partially in jest that he is going to write 900 programs to irrigate each different area according to individual



Second fairway ready for bermudagrass stolons. Mounds on left were planted with hard fescue.

water needs, said Andreasen.

"We're using only half of the water of the other golf courses in the neighborhood," said Buzbee.

Combining Beauty and Conservation

Although the up-front construction costs were higher with the irrigation system, drainage and drought-tolerant turf varieties, Buzbee said FJC wanted a course that would be both enjoyable to play and responsible to the environment.

The result is a 6,700-yard, par 71 daily fee golf course that's scheduled for opening in August 1992. "We're doing something here that's an investment in the long run. We've got something that's years ahead of its time,"

The course also has a striking beauty to it. The tight texture and bright green of the fairways yields to the lighter green, coarser mounds filling the roughs. The wild look of the buffalograss accents the manicured fairways and greens.

"It's a pretty grass," Andreasen said.
"When it is unmowed and the wind blows through it, it waves like a prairie."

Southern California urban dwellers will have a chance to see a glimpse of the prairie past meeting the urban future on this compact course.

"Golfers who want to have an adventure can come here. It will be controversial. Some people will like it and some people won't like it at all," Buzbee said. □

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Research Proves Turf Can Grow in Dome Stadiums

Research funded by three U.S. dome stadiums showed that natural grass can grow well enough under a dome to support world-class soccer play. Two dome stadiums remain in the race for a chance to hold preliminary 1994 World Cup soccer matches.

Dr. James B. Beard, a turfgrass scientist at Texas A&M University, was a member of the three-man research team that tested the ability of turfgrass to grow in a dome stadium. According to international rules, World Cup soccer matches must be played on natural grass. In order to bid on a preliminary soccer match in the World Cup tournament, dome stadiums had to prove to the World Cup U.S.A. Committee that they could provide an acceptable natural grass surface.

"The bottom line was that we demonstrated it could be done and it was a very acceptable playing surface," Beard said.

The Houston Astrodome, the Louisiana Superdome and the Pontiac Silverdome jointly sponsored the research. Dr. C.H.M. Van Bavel, an environmental physicist and Professor Emeritus from Texas A&M University, and Arthur Milberger of Milberger Turf Farms were

on the research team with Beard.

The researchers conducted the tests at the Louisiana Superdome in early July 1991, the same time of year the soccer matches would be held. They tested

Both the test results and the soccer players gave certain grass and lighting combinations full approval. This opens the doors for dome stadiums to consider natural grass events.

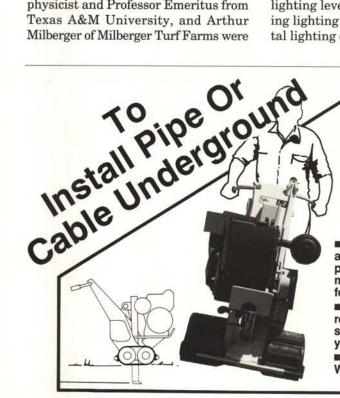
a variety of warm season and cool season turfgrass sods on several different rootzone systems. They also studied the lighting levels from the existing building lighting to substantial supplemental lighting of varying duration.

To best emulate the conditions the groundskeeper actually would be under, the researchers were allowed just six days to establish the field—two days for installation and four for grow-in. They then tried to maintain the surface for at least 22 days, the amount of time necessary to play two or three games at one stadium.

Beard said they tested the turf for quality, ball bounce, density, turf rooting, and stability. They also had world-class soccer players play on the field and evaluate it.

The specific results will be made available later, Beard said. However, he said both the test results and the soccer players gave certain grass and lighting combinations full approval. This opens the door for dome stadiums to consider natural grass events.

"It's one of the few tests that has been conducted in dome stadiums. It confirms to the sports world the feasibility of growing natural grass indoors. Modern turfgrass research has developed techniques and cultural systems that could usher in a new era of natural indoor sports turf maintenance," Beard said. \square



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Super Bowl XXVI:

Minneapolis Metrodome Takes Sports Spotlight Again

he Hubert H. Humphrey Metrodome in Minneapolis will take center stage in sports January 26th as it hosts Super Bowl XXVI. Although it is professional football's first post-season trek to the northern town,

it's only the second of three national championship sporting events the stadium will host.

Minneapolis is still basking in the glow from the Minnesota Twins' World Series victory. Not even a record-breaking October blizzard could dampen spirits as sports fans look forward to the Super Bowl in January followed by college basketball's Final Four in April. For longtime stadium superintendent Dick Ericson, it has been a year of going to extremes.

"I tell the grounds crew members to enjoy it as much as they can because it's never going to happen again," Ericson said. "

It's a lot of work and a lot of extra pressure, but there is nothing else like it."

After more than 45 years as a groundskeeper, Ericson knows how

to savor the good moments. When he works on the Super Bowl, he will join forces with George and Chip Toma who head up the NFL's official Super Bowl grounds crew. George Toma and Ericson are friends from the late 1940s when they both got their start maintaining minor league baseball fields. Between the two men, they have almost 100 years of experience maintaining sports fields.

"Dick's my idol. He is a terrific groundskeeper. He can do it all. In the old Metropolitan Stadium, he always had the field in good shape despite the cold," George Toma said.

Looking back on his career, Ericson remembers being a 12-year-old helper on the old St. Paul football field. By the time he graduated from high school in 1947, he was the groundskeeper at Lexington

Park in St. Paul. He was in charge of keeping the field in good shape for the St. Paul Saints, a minor league baseball team. From there, he moved across town to Nicolett Park where he maintained the stadium for the Minneapolis Millers.

Aside from a couple of stints in the Navy, including a tour in the Korean War, Ericson has always been a groundskeeper. "I've outlived a few stadiums," he joked. His chance to work for a major league club came when the Washington Senators moved to Minneapolis. The team became the Twins and set up shop

in the old Metropolitan Stadium.

"When we first came up in the minors," said George Toma, "[groundskeeping] was very close knit. Dick and I came up together with Joe Mooney. We would have problems and talk about them

among the three of us."

In those days, the Twins and the football Vikings played on natural grass. Ericson became an expert at keeping a grass field in top shape despite freezing temperatures. Today, he still maintains grass. The difference is that the 120,000 square feet of Kentucky bluegrass he maintains circles the outside of the stadium.

Minnesota's harsh climate forced Ericson to learn several tricks to removing snow from football fields. Those skills didn't go to waste when the Twins and Vikings moved into the Metrodome in 1980. Now, instead of removing snow from the field, Ericson is in charge of removing it from the inflatable dome. Keeping snow off the dome roof will be one of Ericson's key concerns around the Super Bowl.

The 10-acre roof weighs more than 300 tons. In order to remain properly inflated, the air pressure inside the building must exceed the outside air pressure. Someone is on-duty 24 hours a day to make sure the roof has the correct air pressure. "Someone actually flies the building," Ericson said.

Wind, snow and rain can cause havoc on the roof. A mere inch of snow can substantially increase the amount of pressure pushing down. To help prevent inversions where snow or rain collect in depressions, Ericson has devised a multifaceted program.

"We watch the weather just like we do for baseball games. If the forecast calls for snow, we will heat the building to 70 to 80 degrees F," he said. Grounds crew members gather information from the Metrodome's own weather station and local weather reports.

The snow melt system in the Metrodome is designed to blow hot air between the roof layers, melting the snow as it falls on the roof. Ericson monitors the system's effectiveness. If the snow starts to get ahead of the melting system, he sends crew members in groups of two up on the roof for snow removal duty. Sometimes they use fire hoses with hot water to melt and slide off collected snow. Other times they use plastic shovels.

"We try to stay ahead of it," Ericson said.

There are 150 spots on the grid-like roof that are most susceptible to inversions. That keeps the crew hopping. This year, Minneapolis had a white Halloween when more than 30 inches of snow fell in late October. The Metrodome was pressed into duty to help area high schools finish out their football seasons, adding more games to the stadium schedule.

Ericson's crews are accustomed to coming to the rescue when snow hits. Those who have 4-wheel-drive vehicles bring them to the stadium and sometimes provide shuttle service to those stranded by winter storms.

"The football game would never be rained or snowed out [because of stadium conditions]. If it is snowed out, it will be because the players or NFL officials couldn't get here," Ericson said.

The green carpet will be rolled out early for the Super Bowl. The last Viking game is December 26. Ericson will have the rare luxury of leaving the field set up for football. Whenever the Super Bowl is held in a new venue, there is a little uncertainty of what to expect, but Chip Toma said he isn't worried.

"Dick knows what it's all about. He knows the magnitude of the game. Dick isn't scared of hard work," Chip Toma said.

The Metrodome crew will scrub the turf clean, leaving the job of painting the special Super Bowl logos to the Tomas' crew. "Dick is a perfectionist and his crew is the same. They will have a nice, clean field," George Toma said.

Painting the field will be one of the biggest challenges facing the Super Bowl crew, Chip Toma said. Special logos go on the 35- and 50-yard lines in addition to the endzones. They won't know which team logos should go in the endzones until the final playoff games are completed January 12.

All the field marks must correspond with NFL regulations. In an indoor stadium, you can't be sure of how well the paint will dry. "You never know what the temperature is going to be in there," he said.

To belp prevent inversions where snow or rain collect in depressions, Ericson has devised a multifaceted program.

At Super Bowl XXIV, the paint was extremely slow to dry because of high humidity. The Tomas brought in blowers towed by tractors. They ran the blowers just along the edge of the paint designs so the air blew lightly across the top. The extra wind helped the paint dry quicker.

With a little luck, the crew will only have to paint the logos once. It is always a challenge to install the logos and keep them in good shape through numerous rehearsals by pre-game and halftime performers. The Super Bowl is more than just a football game—it's an event. The grounds crew adapts to the schedule it gets, even if that requires working through the night.

All practice facilities will be indoors this year. One team will work out at Winter Park, the brand new Viking practice facility in Eden Prairie, a Minneapolis suburb. The full-size indoor football field was completed in October 1991. Sam Monson is in charge of the facility that features the latest version of Astro-Turf.

The opposing team will use the University of Minnesota practice facility. It is also a full-size indoor football field with Astro-Turf. Mike McDonald is the groundskeeper in charge of that facility. He will keep the practice fields in top shape for the visiting team.

The clean, well-maintained field fans see on their color televisions Super Sunday will represent hours of work that most viewers won't understand. However, sports turf managers know that the work will begin again as soon as the 4th quarter clock runs out. Then, it is time to scrub the carpet and prepare for the next event.

"It will almost be a letdown when baseball starts again," Ericson said with a laugh. After thinking for a minute, he pointed out that the Twins will be the defending champions, so you never know what October might bring.



A ten-acre roof keeps fans warm and dry for all events.

1991 Man of the Year:

The Nitty Gritty Dirt Man

By Holly Gibson

It was a dark and stormy night that sent most of Kansas City's masses indoors for cover. At Royals Stadium, business continued as usual. The bright stadium lights illuminated the incessant rain that was beginning to fall in sheets.

The pitcher twisted in strange contortions as he sought a dry spot on his jersey. The umpire finally gave in, signaling the start of a rain delay.

Even faster than the players scampered off the field, the Royals grounds crew sprinted into action. The sound system blared Bruce Springsteen's "Cover Me" as the crew rolled out the tarp. George Toma, head groundskeeper, worked alongside his crew, barked orders like a field commander. Toma wasn't about to let his carefully groomed infield be ruined by a mere rainstorm.

Less than 60 seconds later, the tarp covered the infield. The crowd clustered under the stadium overhangs cheered the crew's efforts. Toma didn't take time to bask in the glory of the moment. Instead, he marched the tarp, supervising the placement of the sandbags that hold it down. A John Deere AMT slowly circled as crew members tossed out sandbags at even intervals. The operation ran like a Desert Storm maneuver. Every step was efficiently executed.

Once everything was secured, the crew ran for shelter in the dugout. Toma was alone on the tarp with his hands on his hips. Ignoring the pelting rain that pasted down his salt-and-pepper hair, he walked the perimeter. With the detail of a drill sergeant, he inspected every inch. Occasionally, he summoned his assistant, Trevor Vance, to make adjustments. Only when he was satisfied with the tarp did he go into the dugout.

Saving the Day

Coming to the rescue has become routine work for George Toma during the course of his 45-year career. While others fret over the unpredictability of sports turf maintenance, Toma thrives on it. The larger the problem, the more Toma's eyes twinkle. Tell him the situation is hopeless, and he'll be on the next plane to tackle the problem.

For the last 25 years, Toma has been the turf man to call when you've run out of options. Whether he gets it from his head, his heart or his back pocket, Toma manages to perform miracles. For Toma, it's all about sticking up for your fellow groundskeepers and helping them out of jams. Toma accepted the 1992 Golf & SportsTURF Man of the Year Award not just for himself, but for all the groundskeepers caring for everything from elementary ball diamonds to professional stadiums. He said he owes a debt of gratitude to the late Harry Gill, who founded the Sports Turf Managers Association so groundskeepers could share ideas.

One of Toma's greatest achievements was transforming Candlestick Park in San Francisco from an unplayable bog into a first-class field. Perched on the edge of San Francisco Bay, Candlestick Park is one of the toughest parks to try to grow grass. The icy wind, regular fog and salty spray exacerbate any groundskeeping mistake.

In 1981, record rainfall and poor drainage left the 49ers facing a home playoff game on a questionable surface. Toma was the NFL's consultant for playing fields, so he was called in to help.

For nearly a month, Toma moved to San Francisco to work with Barney Barron, then director of parks and recreation, to revitalize the field. In addition to reviving the playing surface, he tried to lift the grounds crew's flagging spirits. The bad publicity concerning the stadium had left them demoralized.

Toma discovered the field's problem was a poor interface between the turf and sand base. He ripped up the turf and applied a layer of Enkamat, a water-permeable layer of geomatrix. The Enkamat helped stabilize the turf on the sand base.

He used about 1,000 square yards of Hawaiian kikuyugrass sod cut 2-inches thick in 18-inch-by-36-inch rectangles. After sodding, he used a solid-tine aerator to punch the turf. Then, he top-dressed with Turface.

As the turf began to come around, so did the grounds crew. There was perk in their step. When the grounds crew removed the tarp before the first playoff game, the crowd cheered the immaculate field, Toma recalled. That further bolstered the crew.

After two playoff games without a hitch, people began calling Toma the Sod God. Then San Francisco Mayor



Toma and crew wetting infield during game preparation.



Toma with relief pitchers Steve Crawford, Mike Magnante, and Jeff Montgomery (L to R).

Dianne Feinstein tried to woo him to the city by the bay.

Toma was content to return to his home base in America's heartland. From there, he is free to take off anywhere and solve sports turf problems.

"I think he is a magician when it comes to emergency repairs on football fields," said Jim Watson, an agronomist and vice president of The Toro Company. "He has total confidence in his ability to make repairs and affect a change. He has courage to go ahead and do it.

"He's sometimes controversial but you have to look at the bottom line. The man has enhanced the image of the groundskeeper. You can't argue with success."

Toma and Watson worked together in one of the hottest spotlights a groundskeeper can be placed under. It was 1984 just before the Olympic Games were to be played in Los Angeles. The Rose Bowl in Pasadena was the scheduled site for Olympic soccer tournament, but it was deemed unplayable by members of the Olympic Organizing Committee. They called Toma. By working day and night with pregerminated seed and extra fertilizer, Toma was able to present the Olympic Committee with a first-class field. When the world watched the Olympic soccer games, the natural grass field was its own ambassador.

"When you have a bad natural grass field, it's a good advertisement for artificial turf," Toma said.

Nitty Gritty Dirt Man From Pennsylvania

No matter how long the list of Toma's accomplishments grows, he still likes to tell people he is the nitty gritty dirt man. He takes pride in how far he has come from humble beginnings.

Sports were born in Toma's blood. As a poor youngster growing up in the shadow of Pennsylvania's coal mines, he was a small, scrappy athlete. Although he never grew more than 5-5, he made the most of the talent he had. He played football all winter and baseball all summer. When there wasn't money for proper equipment, Toma improvised. He even made his own baseball gloves. Toma never learned the word impossible.

When the neighborhood kids didn't have a proper baseball diamond, he built his own field of dreams on a spare patch of dirt in the backyard. "As a kid, I used to build pitching mounds in the backyard. I would take an old bedspring and pull it around to level off the infield. I took some hayseed from the barn to seed the outfield. The lines were white ash left over from the black coal burning," Toma recalled with a chuckle.

Money came hard in Toma's family, so there weren't many chances for a young boy to see the local minor league team, the Class A Eastern League Wilkes-Barre Barons, play ball. That didn't stop Toma from hanging around the field. Stanley Scheckler, the Baron's groundskeeper took the teen-ager under

his wing. He showed Toma the right way to drag the infield. In exchange for a free ticket to the game, Toma prepared the infield for play.

Toma didn't give much thought to the future. He was in sports heaven. Not only did he get into games for free, but he also got to be out working on the field.

Destiny struck in the form of the late Bill Veeck. When Veeck bought the Cleveland Indians in 1946, he came to Pennsylvania to reorganize the Barons. He saw something in 17-year-old Toma and named him head groundskeeper. Scheckler became the team trainer and bus driver.

Toma threw himself into his new job. If he needed equipment, he found someplace to borrow it. His mother and uncle encouraged him to do his best. His mom even brought his lunch to the stadium.

The young groundskeeper learned through trial and error. "I didn't know how far this thing (groundskeeping) would go," Toma said.

Cleveland's highly respected groundskeeper Emil Bossard became Toma's mentor. In 1948, he took Toma with him to build two baseball fields for minor league teams in Driver, Va. A year later, they constructed two fields in Marianna, Fla. In 1950, they put in five fields in Daytona Beach, Fla. Three winters of installing baseball fields followed by summers of field maintenance were a crash course in sports field management.

"It's an experience that everyone should have. Anyone who has a major league job should know what it's like to be in a minor league job," Toma said.

Groundskeeping had to take a back seat when Toma was drafted into the Army in 1950 during the Korean War. His leadership skills gained him the rank of sergeant first class.

Upon returning to civilian life, Toma's career resembled that of a minor league ballplayer. He drifted from team to team on the east coast, proving his skills on a series of fields and hoping for a chance with a major league team. In 1957, his call came. Both the New York Yankees and the Kansas City Athletics wanted him. The Yankees planned for him to start on their minor league team in Denver before coming to the house that Ruth built. Charlie Finley was prepared to sign on Toma to take care of Kansas City's old Municipal Stadium.

Municipal Stadium was known continued on page 20



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Man Of The Year

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through out the league as the worst field. Toma's mentor Bossard suggested he avoid Kansas City. Toma decided to see for himself. On Labor Day 1957, he visited the notorious field. There were so many weeds in the turf that the players would pull out weeds before they took their positions, Toma recalled.

"It was bad. I said to myself, 'George, if you mess up this field, no one will notice."

Toma decided to take the position in Kansas City. It turned out to be even more than he bargained to take on. There was no irrigation system to help battle summer temperatures in the 90s. Instead, he dragged hoses around trying to distribute water evenly. The tarp was made from canvas, and Toma swears it weighed 2,000 pounds.

A year of frustration had Toma shaking his head, but not giving up. "Sometimes you have to take a step back before you go forward," he said.

Consulting with Dr. Jim Watson, an agronomist, helped him devise a program to turn around the turf. He decided to plant common bermudagrass instead of Kentucky bluegrass. Kansas City is in the transition zone, so turf managers are constantly wrestling with the advantages and disadvantages of warm season grasses versus cool season turf.

"He had some of the worst conditions someone could hope to grow grass in," remembers Watson.

Watson introduced Toma to pregermenation. It was a match for life. The bermudagrass was the first of Toma's turnaround successes. "People were amazed how good it looked," Toma remembered.

Before long, people were saying Municipal Stadium was the best field in the league. Toma got along well with the controversial Finley. He took what ever Finley threw at him in stride whether it was turning around a field after a rock concert or tending a zoo on the slopes past the outfield.

In Toma's mind, producing a topquality field was always priority one. One day in 1963, he was on his hands and knees putting some finishing touches on the field. A man started to walk across the field. Toma barked at him to get off the field.

Later, Toma discovered he'd thrown out businessman Lamar Hunt. Hunt was looking at bringing a professional football team to town. Rather than offending Hunt, the episode secured Toma's football future. Hunt said if the groundskeeper is that tough, I want him working for me, Toma recalled.

When the first Super Bowl game was scheduled for Los Angeles Coliseum, the NFL hired Toma to prepare and paint the field. They were so pleased with his work that Toma has been the man at the Super Bowl ever since. In 1972, he became the NFL's playing field consultant and took on responsibility for the Pro Bowl as well.

In 1968, the Athletics moved to Oakland. A year later, the Kansas City Royals expansion franchise signed on Toma to take care of their field. Herk Robinson, Royals general manager, came on board six months after Toma. The groundskeeper's loyalty to the Royals organization has been special, he said.

"The pride in what he does is tremendous. He's a relentless worker," said Robinson.

Father and Son

The life of a professional groundskeeper left little time for family. It was not unusual for Toma to be at the ballpark past midnight. One of son Chip's earliest memories is of going to Detroit and running on the field with the Detroit Lions.

"What I though was glamorous was being around the football and baseball players and being able to play on the tractor," Chip said of his youth hanging out at the stadiums.

When it came time to settle down to a regular job, Chip Toma caught on with the Chiefs' grounds crew working for his father. Chip's younger brother, Rick, also served on the grounds crew before joining the Army. Rick is currently a first lieutenant stationed in Germany.

At first, Chip Toma just thought of the grounds crew as a job to bide his time before he settled on a career. The more he worked, the more he concentrated on making groundskeeping his career.

As the son showed an interest, the father taught. Toma's values of hard work and dedication had been instilled since childhood. As Chip worked, Toma educated him in the art of groundskeeping. The son doesn't remember receiving favoritism.

"He expects more out of me. He wants me to do better than everyone else," Chip Toma said.

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