groundskeeper of Rosenblatt Stadium in Omaha, NE; Joe Ardolino, assistant athletic director at Towson State University in Towson, MD; Robert Milano, superintendent of grounds at the University of California, Davis; and Dr. Henry Indyk, consultant with Turfcon in Horsham, PA.

The new officers and executive board have already met twice, a marathon meeting in San Diego and a full-day session in Chicago in March. The next board meeting is scheduled for Chicago in June. In the meantime, the board is working through faxes and over the phone.

Actions before the board include the recognition of new national chapters in Maryland, Iowa, and Arizona. A change in the bylaws regarding the required number of national members in a chapter is being considered.

The executive board is considering two options for an annual conference this fall. One option is to link up with the Green Industry Expo in Indianapolis, IN, in November. The other is with the National Federation of State High School Associations conference also in Indianapolis in December.

COMING STMA EVENTS

Sports Turf Workshop, April 28, Wrigley Field, Chicago, IL. Contact: Don Michaels, Lake-Cook Turf & Speciality Products, (708) 526-0007.

Florida Chapter Workshop, May 11-12, Capital Stadium, Leon County Fairgrounds, Tallahassee, FL. Contact: Bob Hurley, (904) 922-3000, or Ed Birch, (305) 928-0217.

Baseball Infield Workshop, May 21, Commerce City, CO. Contact: Bill Whirty, City of Fort Collins, (303) 221-6660.

Eastern Iowa Baseball Field Workshop, June, University of Iowa, Iowa City, IA. Contact: Gary Peterson, (515) 792-6433.

Chesapeake Chapter Quarterly Meeting, June 3, University of Maryland, College Park, MD. Contact: Ray Flood, (301) 808-3966

California Sports Turf Institute, June 16, Santa Anita Race Track, Arcadia, CA. Contact: Stephen Guise, (818) 574-6378.

Colorado Sports Turf Institute, June 17, U.S. Air Force Academy, Colorado Springs, CO. Contact: Bill Whirty, City of Fort Collins, (303) 221-6660.

Midwest Sports Turf Institute, June 24, Wheaton College, Wheaton, IL. Contact: Greg Petry, Waukegan Park District, (708) 244-7275.

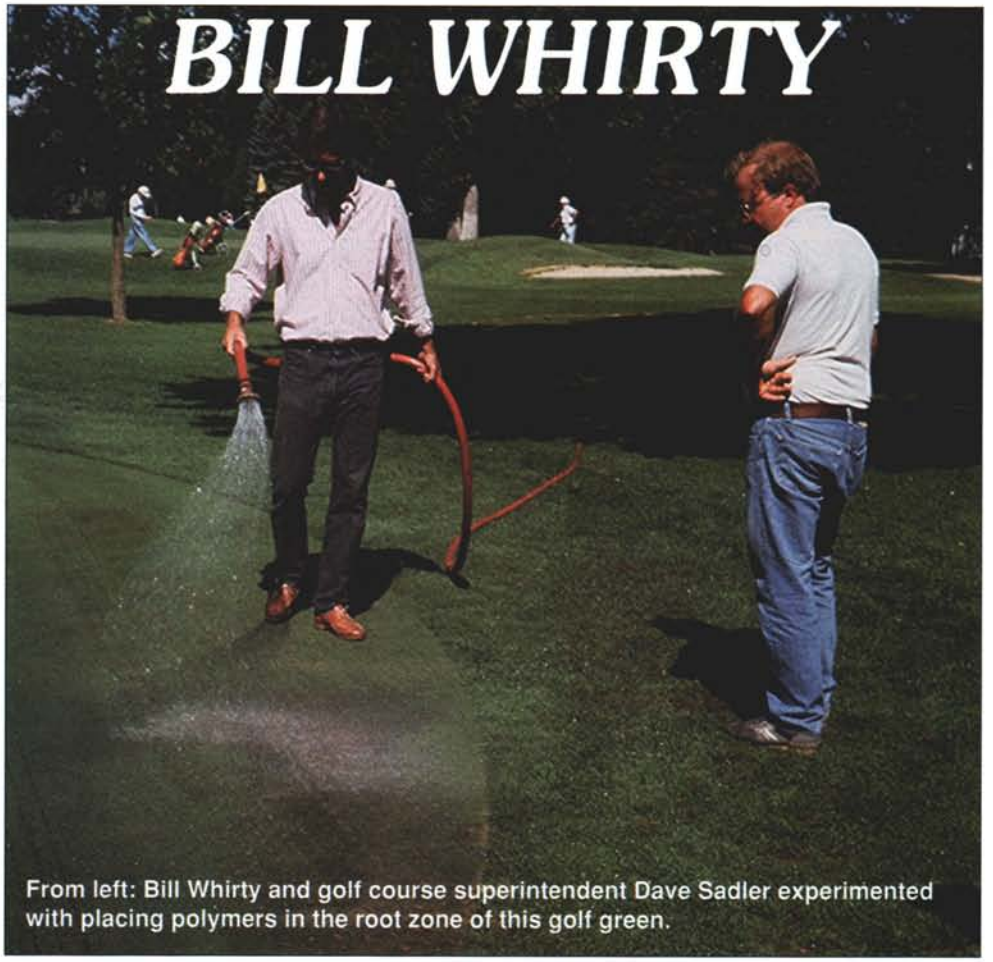
South Carolina Sports Turf Institute, June 26, Greenville, SC. Contact: Bucky Trotter, (803) 862-3071.

Colorado Chapter STMA Annual Golf Tournament, July 1992. Contact: Tom Lujan, Mile High Stadium, (303) 458-4851.

Northwest Sports Turf Institute, July 9, University of Portland, Portland, OR. Contact: STMA, (702) 739-8052.

Western Iowa Baseball Infield Workshop, August, Carroll High School, Carroll, IA. Contact: Gary Peterson, (515) 792-6433.

STMA PROFILE:
THE MANY HATS OF BILL WHIRTY



From left: Bill Whirty and golf course superintendent Dave Sadler experimented with placing polymers in the root zone of this golf green.

By Steve And Suz Trusty

Competitive soccer is big in Fort Collins, CO. Leagues formed for inter-city and intra-city play challenge their opponents on the 26 soccer fields within the Fort Collins park system.

Keeping those fields in shape for safe, competitive play is just one segment of the overall responsibilities of city parks supervisor and STMA member, Bill Whirty.

The Fort Collins parks system offers its residents a wide range of recreational opportunities. Besides the 26 soccer fields, there are five Junior Athletic Association (JAA) football fields, 10 lighted softball fields, two lighted hardball fields and 11 unlighted softball/baseball fields. Within the city's 41 parks are 375 acres of irrigated parkland and 41 playgrounds. Winding along the foothills of the Rockies are trails-14 miles paved and six miles unpaved.

This is Whirty's domain.

"I do have to keep changing hats," says Whirty. "With the trails, the parks, the playgrounds, the irrigation systems and the sports turf fields, there are plenty of challenges. Fortunately, our entire parks department staff functions with an incredible amount of cooperation and interaction. Jeff Lehman, who also has the title of parks supervisor, oversees the electrical areas and the infields. The whole department works as a team."

Whirty has worked for the city for 14 years, the last 10 in his current position. "Participation in youth sports has exploded," he says. "We've experienced a 7-to-8-percent growth rate each year for the past 11 years. In the spring of 1991, 3,300 youngsters were involved in the various programs.

"Maintenance and development form a double challenge. As sports field use has increased, we've been faced with not only maintaining what we have, but with the development of new play areas to accommodate such rapid growth."

Because the parks system is an integral part of the lifestyle of such a broad range of people, each component of the whole system is viewed by some as "the primary function" of the park. This attitude leaves no room for slack, no area where services can be shaved.

Tight budgets and limited funding are a major factor in every city's operation. Doing more with less has made Whirty's task even more challenging.

"The staff for 1992 includes 10 full-time employees with the addition of 20 seasonal employees during the summer," he explains. "In 1991, we had 25 seasonal employees."

These trends led to Whirty's involvement with STMA. Three years ago, he was the program speaker on overseeding for the Colorado State University Turfgrass Conference. During the conference, Whirty and Tom Lujan of Mile-High Stadium discussed common problems. The more they talked, the more apparent it became that there was a

real need to share information.

Up to that point, the Turfgrass Conference had offered two tracks, one for the golf courses and one for lawn care. As well as participating in the Turfgrass Conferences, as part of his quest for up-to-date, usable information, Whirty became a member of the Colorado Golf Course Superintendents Association (CGCSA). These conduits of information and opportunities for contact with industry professionals were, and continue to be, beneficial, yet certain areas of concern were not being addressed.

"Sports turf care has become a very important issue," Whirty emphasizes. "With such growth in youth interest, the management of turf has to be attuned for both safety and playability, without cutting expectations in other areas of the system. The need to communicate and share ideas with others in similar situations is vital."

Augmenting the resources of the national association with an active local branch of sports turf professionals facing common problems had great appeal. Spurred by the possibilities, Lujan and Whirty began a serious effort to form a local chapter of STMA. They contacted likely prospects with an enthusiasm so contagious that the first meeting, held shortly after the birth of the idea, had 11 attendees.

"We got great support," Whirty reports with a smile. "The Midwest and Florida Chapters shared their by-laws and counseled us through the early stages. The national organization gave us a solid backing."

The local group was incorporated as a stage chapter in December of 1990, with Tom Lujan as president and Whirty as president-elect. Membership has now expanded to 97. The 1992 board includes president-elect Ron Martin of the Falcon, CO school district; Vice-President Bill Thornton with Toro Irrigation; Secretary-Treasurer Joe Adams with the City of Greeley Parks Department; Executive Secretary Mark Leisure, who is field manager for Sky Sox Stadium in Colorado Springs; and national representative and past Vice-President Larry Perotti of Sharp Brothers Seed Company. Lujan continues to serve on the board as past president.

The Colorado chapter has indeed been active. With their encouragement, the Turfgrass Conference has added a third track to its program, offering ses-

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One of five Junior Athletic Association football fields under Whirty's care.

Bill Whirty

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sions on sports turf and parks.

"The national association of STMA came through with the additional coverage needed to support this track at the 1991 conference," says Whirty. "Members from national provided key parts of the program."

Along with continuing its involvement with the Turfgrass Conference, the chapter holds a hands-on workshop during the summer meeting. Proceeds from the workshops are split between the national organization and the state chapter, with 20-percent channeled to STMA and 80-percent to CSTMA.

CSTMA is also working towards holding an STMA regional institute. The institutes bring in even more national people, and cover how both the chapter and national organization interact and influence each other. They also provide funds to STMA by reversing the percentage of proceeds distribution- with 80-percent going to STMA and 20-percent to the holding chapter.

At Institutes, "customers" of the sports turf professionals are invited as speakers and participants. These customers, coaches, athletic directors and players, provide further insight to the common goals of safe, playable sports turf.

Whirty says, "Where the workshops cover nuts and bolts, the Institutes broaden the scope of information and add the important dimension of customer communication. The Colorado chapter is looking forward to continuing to work together with the national STMA board to achieve goals such as hosting a regional Institute."

According to Whirty, the Colorado chapter plans to reach out more to academia and others who can help get the word out to students that sports turf offers viable, exciting career options with great future potential.

Another factor in the goal of strengthening sports turf professionalism is interaction among turf specialists in related fields. Because of his involvement with the CGCSA, Whirty is on the Scholarship Committee of the Rocky Mountain Turf Foundation, a coalition of area turf professionals. The organization is branching out, having added the Sod Producers and the CSTMA. In the past, only the CGCSA has been able to fund scholarships. Whirty hopes to encourage more involvement on the part of CSTMA, including raising funds for sports turf scholarships.

Take a person who understands the value of his profession, knows inter-industry communications are vital, is willing to share the information learned through successes and failures, has the ability to confront multiple challenges, and you'll find a leader. Add the ingredients of knowledge, flexibility, enthusiasm and leadership, and you'll find "hat changer" Bill Whirty. ❑

STEPS TO WILDFLOWER SUCCESS

Wildflowers can help soften otherwise harsh landscapes. Photos courtesy S & S Seeds.

Wildflowers can be a colorful, relatively low-maintenance addition to a park, recreational facility, or golf course. However, they should succeed, both in the short and long-term. Here are a few suggestions, courtesy of the National Wildflower Research Center in Austin, TX, that can keep the wildflowers growing into the future.

Tempering Great Expectations

"People need to realize it takes three to five years to get good wildflower establishment," explains Elinor Crank, a research scientist with the National Wildflower Research Center. "You have to know what to expect. There are periods when a wildflower installation isn't going to be colorful."

One way to help wildflower installations retain their color, Crank suggests, is to include species that bloom at different times. Later blooming wildflowers will hide earlier blooming wildflowers that have gone to seed.

Maintenance is equally crucial. "You can't just buy seed, plant it, and then forget it," Crank asserts. "Wildflowers need monitoring and maintenance. A lot depends on the maintenance program. If, for example, you don't feel the need to have the wildflower installation mowed the minute it turns brown, that will influence the seed mix."

Go Native

"There were a lot of problems in the beginning with wildflower use because people planted non-native species for the 'big color show,' and those often die out," Crank observes. "That's one of the reasons we emphasize using native species."

How native is native? In the prairie states, for example, Crank says that "native" can mean that the species is grown within a 100-mile radius of the area in question. She adds that although such a specific guideline is important for prairie grasses, it is not yet known how significant it is for wildflowers.

Before settling on a wildflower species, a visit to a natural, undisturbed area near the proposed installation site is a good idea. This will help you determine the wildflowers that will perform best on your site. Inventory the site and its microhabitats, such as wet, low-lying areas, shady areas, or open fields, then determine the species best suited to these site conditions.

When selecting a wildflower species, consider:

Height. What is the plant's maximum height of maturity?

Bloom Period. When does the species flower?

Life History. A mix of perennials and self-seeding annuals and biennials is optimum in many cases. Annuals generally germinate and flower in the first year. Perennials often take two to three

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Wildflower installation along a tee and fairway at the Vintage Club in Palm Desert, CA..

Wildflowers

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years to mature before flowering, expending most of their initial energy on development of a healthy root system.

Availability. Is seed commercially available?

Noxious Weed Potential. Is the species highly aggressive or competitive? Does it have the potential to become invasive?

"One of the potential problems with wildflowers in residential settings is that often there are weed ordinances that prevent people from having natural lawns," Crank notes. "The weed ordinance issue began as a weed control method, but currently as applied to wildflower plantings it is often used for aesthetic reasons. Often the ordinances have height restrictions where the vegetation cannot be above 18 inches, for example."

Pursue Quality

According to the National Wildflower Research Center, the two crucial indicators of wildflower seed quality are **germination percentage** and **purity**. A third indicator, **Pure Live Seed** (PLS) combines these percentages.

Germination percentage refers to the proportion of seed that will germinate under optimum laboratory conditions. Although these conditions are by design far less demanding than those in the field, in all cases, the higher the percentage, the better the seed quality.

Storage and harvest periods can affect germination percentage. Improper storage can reduce germination percentage. If a particular type of seed was harvested a year ago, for example, it would be important to know how it was stored.

Purity is a measure of the proportion of wildflower seed a given sample contains. Wildflower seed has many shapes and sizes, which often makes it hard to clean. The portion of a sample not from the stated species may include seed for other varieties, noxious weed seed, or inert matter such as chaff and broken seeds.

PLS combines germination percentage and purity. It is reached by multiplying together the numbers for germination percentage and purity percentage, then dividing the total by 100. The quotient indicates the percentage of pure live seed. Generally speaking, the higher the PLS, the better the quality of seed.

Set Your Goals

"There are really two directions you can take with wildflowers—ornamental and restoration" says Crank. "In terms of planting technique, they may be similar, but their goals are different. These days, we're seeing a lot more restoration work, where people want to put back the natural environment, particularly on large sites."

In addition to the selection recommendations mentioned previously, Crank suggests the following procedures on restoration projects. Many of these can also be applied to ornamental projects.

Salvage. Native plants on the site can be salvaged and put back into the site.

Contract Grow. Local nurseries will often "contract" grow specific native plant materials if contracted well in advance of specification and installation.

Collect Native Seed. Not all species may be available from your local supplier. Having someone collect native grass and wildflower seed is cheap insurance against unavailability.

Stockpile Native Soil. Soil from another area may not be ideal for the wildflowers that were carefully researched and selected for the specific site. The stockpiling of native soil present on the site is most beneficial as a source of native seed that is present in the soil.

Prepare The Site

If the site is extremely weedy, with no desirable native plants, you would need to scape the soil clean or use herbicides before planting. As a rule, however, you want to disturb the soil as little as possible to avoid bringing up any buried weed seeds. Wildflowers can also be "interseeded" in existing vegetation, if the site is not weed-infested. Such areas include (warm-season) grasslands, which must first be mowed. The soil should then be "roughed up," or a layer of topsoil should be applied, before seeding.

Use Commercially Available Wildflower Seed. Look for availability of native species, quality, and price.

Carefully researched and specified, wildflowers can add low-maintenance, water use brilliance to your recreational facility or golf course. Remembering these few simple guidelines today can help keep everyone satisfied tomorrow. ❑

Editor's Note: Much of the information in this article was adapted from the National Wildflower Research Center's "Guidelines For Landscape Architects." To receive the publication or additional information, contact the organization at 2600 FM 937 North, Austin, TX 78725-4201, (512) 929-3600.

NATIONAL WILDFLOWER SEED SUPPLIERS

There are a number of wildflower seed companies around the country. If you're searching for seeds that are suitable for your area, you may want to consider a local supplier. However, some national distributors may also be able to meet your specific needs. Here's a look a brief look at the three firms that distribute wildflower seed nationwide.

Known primarily for its turfgrass seed, **Lofts, Inc.,** headquartered in Bound Brook, NJ, markets its increasingly popular Pinto brand of customized wildflower mixtures. Lofts grows seed in the United States, Europe, and Australia and has complete research, blending, and warehousing facilities on U.S. East Coast and West Coast—the New Jersey facility and Lofts Great Western Division in Oregon. The company distributes through branches in Massachusetts, Ohio, Maryland, and Georgia, as well as a nationwide network of regional distributors.

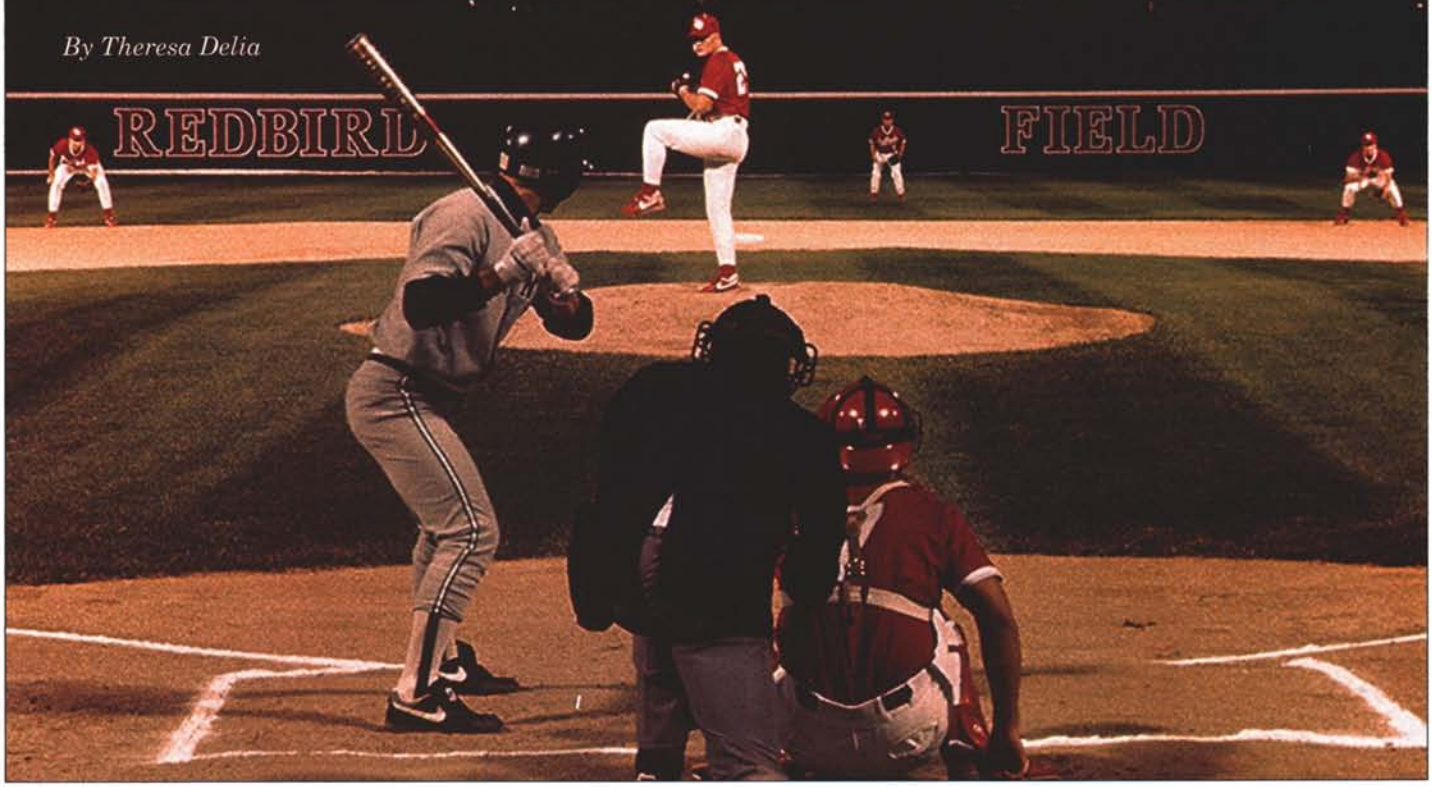
Based in Lompoc, CA, on the state's fertile central coast, **Environmental Seed Producers, Inc.,** has been growing and selling wildflower seed since 1974. The company sells its seed wholesale to other seed companies, but also sells to state transportation departments, city parks, golf courses, hydroseeders, and landscapers. The firm carries more than 120 wildflower species and has formulated its own mixes suitable for regional climates around the United States. They also design custom blends.

S & S Seeds in Carpenteria, CA, is a wholesale supplier of wildflower, tree, shrub, grass, and native plant seed. Its wildflower seed is collected from native stands, grown on its own farms, and seed grown by contract producers. The company has a seed cleaning and processing facility for seed conditioning. All seed lots are tested for purity, germination, and noxious weeds in certified seed laboratories. The company supplies wildflower seed to state agencies, seed dealers, and green industry professionals around the United States.

Turf Seed, Inc., in Hubbard, OR, markets an extensive assortment of seed mixes containing wildflowers, native grasses, and low-maintenance grasses. Custom mixes are available. Wildflower breeding, testing, and selection are under the direction of Crystal Rose Fricker.

COLLEGE DIAMOND OF THE YEAR: REDBIRD FIELD SOARS

By Theresa Delia



When Charles A. Scott started as the grounds superintendent of Illinois State University, he was unimpressed with the baseball field. It was flat, uneven, and had poor drainage.

"It looked like any average field you might find," he recalls.

Luckily, plans for the new field installation were on the drawing board.

Today, after six years of careful maintenance, cooperative efforts by various school departments and successful experimental technology, ISU's Redbird Field is the Diamond of the Year in the College Division.

Scott is proud of the award, but quick to give credit where credit is due. He acknowledges his staff of workers, headed by athletic turf specialist Mike O'Grady and the baseball team. Baseball coach Jeff Stewart feels Scott and his department have done an excellent job in a difficult situation.

"The field was brand-new, but poorly conceived," Stewart says. "Home plate was 19-inches lower than the rest of the field. Through his (Scott's) leadership, we became a premiere natural-surface baseball diamond."

Early Appreciation

Growing up with three brothers near Lake Bloomington, IL, Scott had an affection for sports and the outdoors early in life. "We spent a lot of time around the lake hiking, fishing for smallmouth bass and sailing," he says.

As a high school student, he spent summers working for a landscape company. This gave him the incentive to turn an interest into a career. He received his bachelor's degree in plant and soil science from Southern Illinois University. After graduating, he managed the garden centers of Greenview Companies in Bloomington, Champaign and Springfield, IL.

He began at ISU in 1985. Besides managing the baseball field, his department is responsible for 128 acres of turf on the 850-acre campus, including the football, soccer, softball and track fields. In 1986, ISU started building Redbird Arena, a 10,500-seat facility. The site for the arena was the existing baseball field, creating the need for a new field.

Although the baseball field construction project was contracted out, Scott contributed construction ideas. He knew the old field had poor infield drainage and that without changes, the new field would inherit these problems. A sand-based infield with drainage tiles was installed and, after "playing around" with several sprinkler heads, Scott and O'Grady chose Hunter I-20s with stainless-steel risers.

Maintenance Practices

Scott has a simple adage when it comes to field maintenance: "Competitive athletic turf facilities need to be treated as if they were someone's meticulously cared-for front yard."

Redbird Field hosts 75 games from March through November. It is used by ISU's varsity team, two collegiate summer teams and the University High School's varsity team. In addition, the outfield is used for football practice when their field is unavailable for play.

The skinned area consists of 89 percent silt, 7 percent clay and 4 percent special sand mixtures. It is dragged with a nail board and dragmat before each

game. The edges are touched up with hand rakes and the entire area is lightly watered. The skinned area and baselines are wet lightly between double headers and dragged again after the game.

On the pitcher's mound, O'Grady applies a blue gumbo clay that is allowed to dry and sifted through a mesh screen. It is then watered and packed into place. It is covered by regular infield soil mix and raked level. Leftover gumbo clay is kept in a ziplock bag to keep it moist.

"This gives us the opportunity to rebuild the front of the pitching rubber between double headers in just a few short minutes," O'Grady says.

Fertilization consists of three applications of Par Ex 24-4-12 at two pounds per 1,000 square feet. An additional four pounds of potassium are applied per 1,000 square feet through the growing season just prior to high volumes of play on the field. Liquid iron is applied in early spring to "green-up" the field for the first game, and again in the fall to augment slow release granular fertilizers.

Redbird Field infield under construction.

Applied Theory

Much of Scott's success with field maintenance comes from experimentation. He and O'Grady work with Dr. Hank Wilkinson from the University of Illinois on research projects. Monthly samples of freshly cut turfgrass are sent to Dr. Wilkinson for plant tissue analysis. "Based on the information found in the reports, we could adjust our fertilization program to provide us with the best quality turfgrass," Scott explains. "Dr. Wilkinson's analysis allows us to spoon-feed our turf in a manner that would be most beneficial both aesthetically and horticulturally."

Scott relies on integrated pest management to control weeds and insects. A single application of Dacthal is made at a rate of five ounces per 1,000 square feet in mid-April to control crabgrass. Trimec, applied in early May, controls broadleaf weeds. Both are spot-sprayed during the season where needed.

The appearance of sod webworms warranted an application of Dylox 6G in early June. One application at a rate of three pounds per 1,000 square feet provided Scott and his crew with good control.

Wear patterns in the field promoted O'Grady to experiment with a seaweed derivative growth enhancer. Marked improvement in certain areas has limited resodding to the front of the dugouts and the pitcher's mound.

During the summer months, the infield is watered daily. Water is applied at 1-1/4-inches to 1-3/4-inches per week. The outfield requires only 3/4- to one-inch per week.

Overseeding high-traffic areas is vital. In the university greenhouse, O'Grady pregerminates the seeds for the procedure, using a five-gallon bucket on a heating mat. The seeds soak

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Redbird Diamond

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and stay in the heated bucket for three days. The ryegrass is then mixed into a rough soil surface. Sand and growth enhancement is added to promote faster root development.

To protect the turf in the infield during batting practice, O'Grady covers the area around home plate and the batters' cage with a geotextile fabric.

They use a rain tarp on the infield. Because ISU is a member of the Missouri Valley Conference, it is required to cover the field 24 hours before game time, if there is a threat of rain.

Scott and his crew aerify the infield with a Ryan Mataway. A Ryan Renovaire is used in the outfield. Aerification is done four times during the playing season. Topdressing is added once a year. For the outfield, soil amendments are mixed with 30 percent bulk peat moss and 70 percent bank sand. For the infield, they use bank sand only. After topdressing, sand and peat moss are incorporated into the core holes.

Scott has purchased a Toro Pro 84 triplex for O'Grady, who operates all the equipment. Cutting height is easily adjustable, allowing the field sections to be "personalized." Infielders, for example, tend to like a shorter cut, which provides faster action.

The Team

Scott and O'Grady are not the only ones who play a role in the field's appearance and upkeep. Even the baseball players get into the act.

"There is good department communication," Scott explains. "Every day the players do their part to maintain the field with raking and edging. They like to do it and it gives them more pride in their field."

Scott and O'Grady speak with the coaches often. If the soccer field is too wet for practice, they will ask the coach to use the football field.

"The players tell us what they need and will assist in the maintenance," Scott says. "The third baseman takes care of his area, the shortstop, his area. There are hundreds of eyes helping us."

Scott especially appreciates the "eyes" of O'Grady. Although his formal training is limited to a few horticulture classes at the college and STMA seminars, Scott says O'Grady treats the field as if it were his own. He devotes many of his personal hours to it. "Without his dedication, the field wouldn't look the way it does," says Scott.

Scott and O'Grady are not the only ones who play a role in the field's appearance and upkeep. Even the baseball players get into the act.

O'Grady has been at the university 17 years. His experience comes from the school of "hard knocks" and trial-and-error. He appreciates Scott allowing him to make his own decisions about the field.

"We have a good relationship," O'Grady says. "He allows me to do what I want with the field, even if he doesn't agree. Sometimes he is right and sometimes I am right, but, I can always tap Chuck as a resource."

Support From All Camps

Response to the diamond from the school officials has been positive. "They all say, `The field looks good,'" Scott says. "I have yet to hear a negative comment."

Spectators have found their own way of enjoying not only the game, but also the field. Although, permanent seating numbers only 500, up to 200 people crowd the hillside next to the third baseline on game days.

Eventually, that may change. Designs for seat expansion up to 1,500 are in the works. Included in the plans are a press-box, concession stands, an access area for the handicapped and new showers and lockers for the teams. Scott hopes construction will begin within the next few years.

As far as Scott is concerned, Redbird is already the best collegiate baseball field in Illinois. His maintenance techniques not only affect the safety of the players, but the field is also a sales tool for school recruitment.

Says Scott, "Maintenance of a field takes a community effort, and Redbird Field reflects that." ❑