

# FROM THE PUBLISHER



In other parts of the world, such as in Japan and Europe, the grounds manager and the gardener are held on a level of esteem we have yet to see in our country. They are treated with the respect worthy of their position. Although I feel we are heading in that direction in the U.S., it seems to be taking an awfully long time.

In my travels abroad I have seen some great landscaping, but I truly feel nothing compares to the U.S. Although I have only seen a few golf courses outside of this country I feel they don't hold a candle to ours. I am not talking about how difficult it is to play them, but rather about the condition of the turf. The use of color around the clubhouse, etc.

It takes real dedication and a commitment to quality and perfection. It takes a discipline to strive to meet the high goals we set for ourselves. Sometimes we may not reach those goals, but it certainly won't be for lack of trying. It also takes a great deal of technical expertise acquired through a formal education or through practical experience from the "College of Hard Knocks."

Professionals coming into the field today must have a degree in horticulture, park management, etc., from a recognized university. With that degree in hand they first have to apprentice to begin to put into practice what they learned in school. More importantly they will gain practical experience that school could never teach them.

A good professional must have a working knowledge of turf: the different varieties, how each stands up to wear, what the best cutting height is, what diseases each is susceptible to and how to treat them. He must know about insects, fertilization, and irrigation. And now new words keep popping up...effluent or recycled water, water audits, water management, etc. The professional also has to learn about trees, shrubs, ground cover, annuals for color, etc. He must also know about hardscapes, waterscapes, nightscapes, grading, drainage, etc.

Recently I had an opportunity to play golf on either a brand new golf course or one that was more established. It was a hot day and I asked the person who was making the arrangements which one he thought I should play. He remarked that although the new course was nice, I should play the other course because it had trees and would be cooler.

At the Golf Course Show in February, I spoke with Dr. Alex Shigo, a noted tree expert and former U.S. Forest Service biologist, who gave some seminars on the care of trees. His comment to me was that most golf course superintendents look down to see the turf. He suggested that they look up every once in a while. He expressed shock at the health of trees on some of the golf courses he toured.

One begins to realize how important a role trees play on a golf course or in a landscaped environment. Take a moment to think how many years it takes for a tree to grow. And because trees can take more abuse than turfgrass, we have a tendency to take them for granted. So take a page out of Al Shigo's book--look up once in a while and inspect the trees.

During the playing season, whether it's baseball, football or golf, the professional is at work seven days a week, sometimes putting in 15 hour days. It would be nice to know he is appreciated and recognized by professional athletes and broadcasters once in a while.

If the pros were playing on a golf course not up to par, they would complain like heck. If a professional baseball player goes after a ground ball and doesn't make the play, he'll sometimes blame it on the condition of the field: The grass is too high so the ball slows down, the grass is too short so the ball goes faster. If a football player misses a pass, he'll complain that the field is bumpy and he was afraid he was going to trip. This may sometimes be true, but it would be nice to hear an announcer say, "The field is in great condition--thanks to so and so and his ground crew."

With all the telecasts of sporting events these days, the work load has increased. The burden of keeping the fields and courses looking good at all times, in addition to being healthy, has also increased. To entice good young ambitious people to enter this field we must upgrade the image. To keep the professional we must upgrade the compensation package. We can't expect the professional ball player or golf pro to earn upwards of \$1 million and have the professional grounds manager earn \$40,000 or less.

I will continue to cry out on behalf of our professionals until they get the recognition and compensation they so truly deserve. I look forward to the day when the profession of a grounds manager is held in even higher esteem in the U.S. than it is in Europe.

# THE FRONT OFFICE

## OPINION PAGE

### THE BUSINESS OF COLLEGIATE SPORTS



**S**ports turf managers at many colleges and universities today find themselves in the middle of a marketing war, one they have little to no control over. However, when the dust settles, I believe that sports turf managers will have played a role that few athletic directors currently realize they can play in the success of collegiate sports.

Two thirds of NCAA Division I schools are expected to lose money on their athletic programs this year, up from 42 percent in 1985. Athletic directors find themselves increasingly occupied with the finances of sports, at the expense of

providing an important spirit of competition for students to apply to their future careers. The game isn't simply a matter of winning anymore, it's a matter of survival through corporate sponsorships, rights fees and merchandizing.

Athletic directors blame the present condition of college sports finances on three culprits. First is inflation. The cost of tuition, as well as the cost of athletic scholarships, has nearly tripled at many universities during the past ten years. A U.S. Department of Education study predicts that tuition to public universities will climb another 80 percent before the turn of the century.

Government intervention in the form of Title IX has complicated matters further by requiring colleges to increase their support of women's sports if they expect to receive Federal assistance.

NCAA's efforts to negotiate network television revenues and distribute them among all its members, something which has worked well for professional sports, was uprooted in the courts by a few disgruntled members. Now each school competes against all others for a share of television rights fees. This deregulation cost NCAA member colleges a total of \$24 million in 1986 in lost television revenues. Since the NCAA no longer controls the number of events on the air, a glut of games has driven the price per game down by more than 40 percent.

To recover these losses schools have been forced to raise ticket prices. This has backfired at some institutions by hurting ticket sales, especially with students. In some instances, fees from local cable television companies have not made up for lost ticket sales. Furthermore, non-revenue generating sports, such as wrestling, golf, tennis, and track, have been placed on the chopping block to reduce expenses.

One thing is clear, individual colleges must aggressively market their sports programs to corporate sponsors, television and radio networks, and ticket buyers.

For amateur events to compete against each other as well as professional events, they will need to create a "network quality atmosphere." That means they must offer professional-quality fields, golf courses, and other facilities. Only knowledgeable sports turf managers and golf course superintendents have the ability to meet these higher standards.

Don't be surprised when you are asked to paint a corporate logo in addition to team logos on stadium fields. Be ready when you are asked to make provisions for television cameras in stadiums and on university golf courses. Perfect your skills with mowing patterns, field marking, pregerminating seed, turf color enhancement, soil moisture control, and traffic tolerance. You will need to know what it takes to provide a championship golf course or stadium field.

College athletics today is a \$3 billion industry. To get their piece of this huge and growing pie, colleges will have to compete not just on the field, golf course, or court, but in the business office. In all places, the playing surface must be considered a critical factor in attracting fans, support, and rights fees. That makes the collegiate sports turf manager more valuable than ever.

*Bruce F. Shank*

# EVENTS

## CALENDAR

### JULY

**25** Midwest Regional Field Day, Purdue Agronomy Farm, West Lafayette, IN. Contact: Barb Meyer, Purdue University, Dept. of Agronomy, Lilly Hall, West Lafayette, IN 47907-7899, (317) 494-7899.

**25** Sports Turf Manager: Field of the Future, Cooperstown Central School, Linden Avenue, Cooperstown, NY. Contact: New York State Turfgrass Association, P.O. Box 612, Latham, NY 12110, (800) 873-TURF.

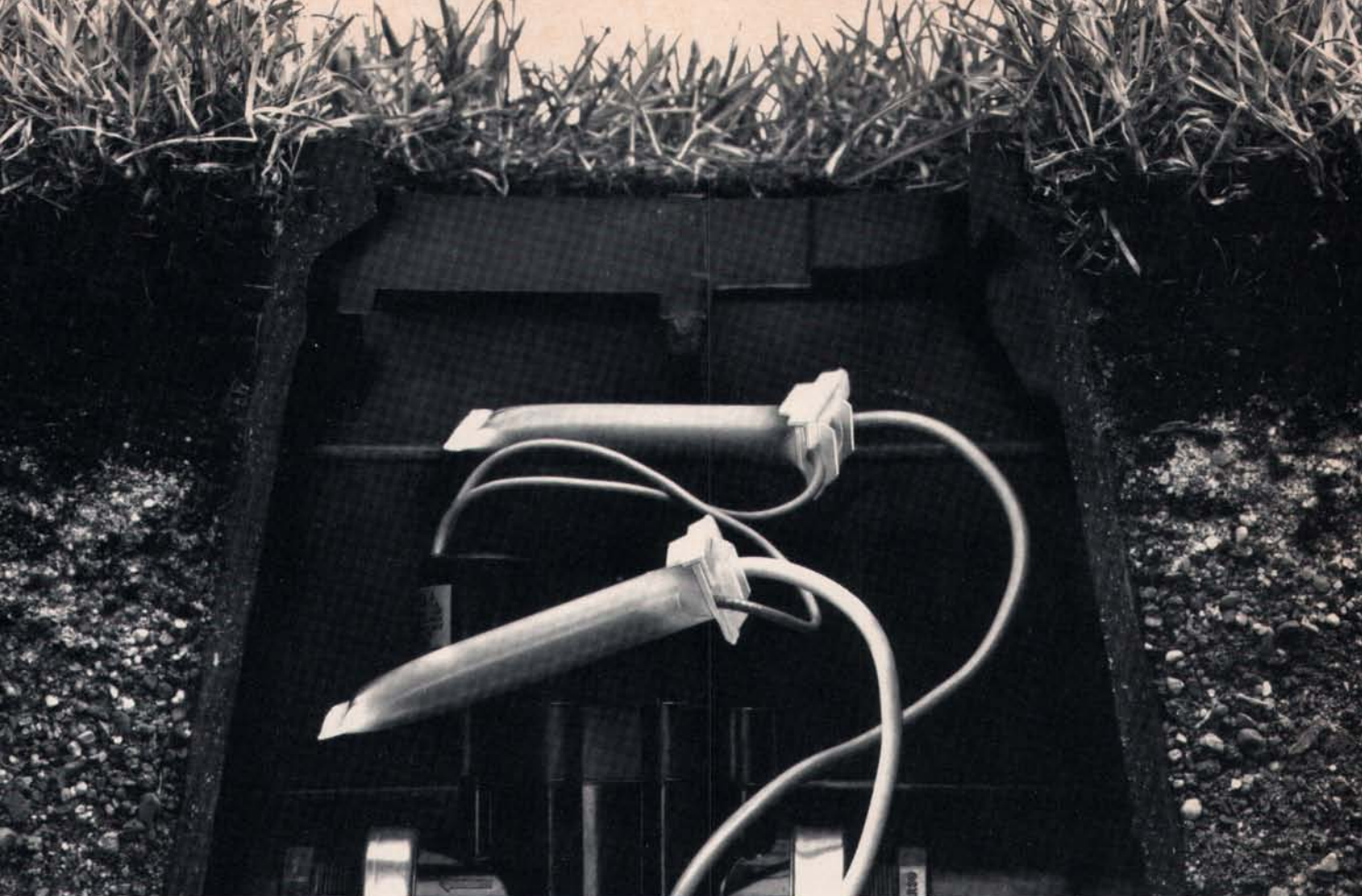
### AUGUST

**7-8** Georgia Golf Course Superintendents Association Summer Meeting, Stone Mountain Memorial Golf Course and Conference Center, Stone Mountain, GA. Contact: George Kozelnicky, GGCS, P.O. Box 6377, Athens, GA 30604-6377, (404) 543-7720.

**13-16** Park Planning and Maintenance School, Colorado Springs, CO. Contact: National Recreation and Park Association, Western Regional Office, P.O. Box 6900, Colorado Springs, CO 80934, (719) 632-7031.

**17-18** Park and Recreation Safety School, Colorado Springs, CO. Contact: National Recreation and Park Association, Western Regional Office, P.O. Box 6900, Colorado Springs, CO 80934, (719) 632-7031.

**30** University of Rhode Island Turfgrass Field Day, Turfgrass Research Farm, Plains Rd., Kingston, RI. Contact: Dr. C.R. Skogley, Plant Sciences Dept., Woodward Hall, Kingston, RI 02881.

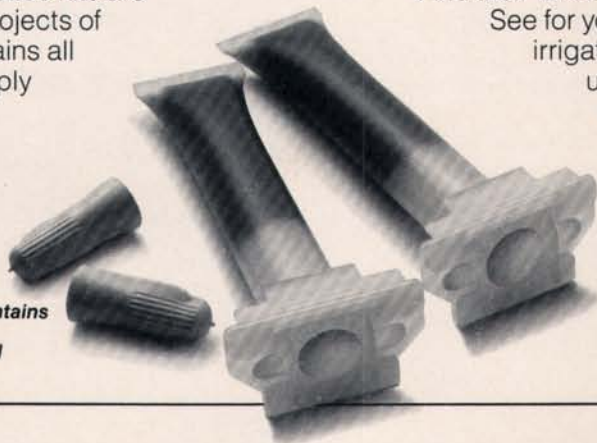


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# 3M

# THE EXTRA POINT

## STMA NEWS

### FROM THE EXECUTIVE DIRECTOR

I want to thank all of you who have renewed your memberships in STMA. It is through your support that STMA will continue to grow and accomplish its mission of education and improvement of sports turf everywhere.

The Midwest Sports Turf Institute was held at William Rainey Harper College in Rolling Meadows, IL. The educational sessions were very well attended. More than 200 sports turf managers took advantage of the program. The speakers were well-prepared and informative. Keynote speaker Ken Mrock, head groundskeeper for the Chicago Bears, gave us all a good example of what teamwork means in sports turf management.

On behalf of STMA, I would like to thank the committee members who made the Midwest Sports Turf Institute a success. They include George Rokosh, College of Du Page; Mike Schiller, Glenview Park District; Greg Petry, Waukegan Park District; and Chuck Gura, W. R. Harper College. The committee will be meeting this month to lay the foundation for a Midwest chapter of the STMA. I wish them the best of luck.

STMA's next regional institute will be held at the College of Holy Cross in Worcester, MA on September 26, 1989. STMA is working in conjunction with the Professional Grounds Management Society on this, the second institute held at Holy Cross. The program is in the final planning stages. A complete version will be announced in Extra Point as soon as the speakers are confirmed. I hope that many of you from the New England area will plan to attend this event.

### WINTER TURF PROTECTION IS FOCUS OF NORTHEAST SPORTS TURF INSTITUTE

Maintenance of sports fields during the winter is the focus of the second annual Northeast Sports Turf Institute scheduled for Holy Cross College in Worcester, MA, on Tuesday, September 26.

The one-day program, cosponsored by the Sports Turf Managers Association and the Professional Grounds Management Society, will include educational sessions, exhibits and equipment demonstrations. The Northeast Chapter of PGMS will be hosting the event.

"The institute will provide information on winter turf protection vital to managers of athletic fields, sports complexes, and large and small turfgrass areas," said James Long, head groundskeeper at Holy Cross and president of the Northeast Chapter of STMA. "It is a new subject for the institute, but one we must face every winter in the Northeast."

Educational sessions will cover innovations using today's technology to protect sports turf surfaces. They include

preparing athletic turf for winter, use of gypsum to compensate for salt damage, preventing damage from snow removal equipment, and avoiding damage from ice storms.

"I encourage everyone responsible for turf areas in the Northeast to attend the seminar," Long urged. "It is an excellent professional opportunity to learn from the experts and to see the latest equipment available from industry suppliers and distributors. But, most of all, it is a unique opportunity for sports turf managers to share their problems and solutions so that we can all advance in our profession."

Contact Ginnie Scharfman at STMA headquarters or Allan Shulder at PGMS headquarters for registration information. Shulder can be reached at 12 Galloway Avenue, Suite 1E, Cockeysville, MD 21030, (301) 667-1833.

### NEW YORK OFFERS SECOND SPORTS TURF SEMINAR

The second New York State Turfgrass Association summer seminar will be held July 25, at Doubleday Field, Cooperstown, NY. Entitled, Sports Turf Manager: Field of the Future, the program will focus on sports turf liability, safety and maintenance. The seminar is being held in conjunction with the New York State Association for Superintendents of School Buildings and Grounds, New York State Athletic Administrators Association and Cornell Cooperative Extension of the Capital District and Central New York.

Featured speakers include Dr. Donald Waddington, Penn State University, noted expert on field surface conditions and their relationship to safety, a representative for the Yankee organization and a liability insurance expert.

The afternoon session will feature John Liburdi, head groundskeeper, Heritage Park, Colonie, NY, STMA member and winner of the 1987 Best Baseball Diamond of the Year Award. He will discuss his experiences and ideas on sports turf maintenance. Dominic Morales, associate professor of horticulture at the State University of New York in Delhi, will address turfgrass identification, field renovation and pest control. He will integrate current research findings and maintenance procedures.

### CATCH THE ACTION

Mark your calendar!

**September 26 - Northeastern Sports Turf Institute**  
College of Holy Cross, Worcester, MA.

**January 19-21, 1990 -**

**Annual Conference and Trade Show**

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## "FIELD OF DREAMS" WAS FLEETING PROJECT

The Proturf Division of Pacific Sod in Camarillo, CA is accustomed to unusual requests from movie producers. But last summer, when Gordon Productions asked the company's Neil Beeson if he could build an authentic-looking professional baseball diamond in the middle of an Iowa cornfield for "Field of Dreams," he thought he had heard it all.

The production company selected Dyersville, IA, a small dairy farming community 60 miles west of Dubuque, for filming. Farmers there grow their own feed corn to keep milk cows well-fed and productive. As you drive along the two-lane rural routes outside of Dyersville, all you can see is miles and miles of cornfields surrounding dairy barns and rustic farmhouses. The company found two farmers willing to give up a couple of acres for one season, as long as the producer replaced the corn lost.

"When we arrived in Dyersville last June, the corn was five-feet-high," recalls Beeson. "It's the first time I've had to cut down corn in order to build a field. The schedule was tight. We had to complete the project over the Fourth of July to meet the producer's schedule. That gave us only seven days to build a baseball diamond out of a cornfield." Beeson increased his manpower with the help of Dubuque Country Club and the Dyersville High School baseball team.



As soon as the field was cleared, graded and surveyed, Musco Lighting of Muscatine, IA, installed the light standards. "You couldn't tell in the film," explains Beeson, "but the foul lines were only 175 feet. The whole field is roughly an acre shy of a real one."

Next the warning track and infield skinned areas were excavated and filled with lime chips. The producer wanted bright red dirt to provide contrast, so these areas were capped off with screened brick. Coarse screenings were used for the warning track and finer ones for the basepaths.

After finish grading, starter fertilizer was applied to the turf areas. Seven Cities Sod trucked in more than an acre of Kentucky bluegrass sod from Davenport. "I was concerned about some of the high wear areas," said Beeson, "so we used large staples to anchor the sod in these areas. We borrowed a mower from the local golf course

and started cutting a pattern into the field."

Musco returned to install and aim the lights. In seven days, the "Field of Dreams" was ready. The film crew and actors moved on site for ten days and nights, and then they were gone.

"It would have made a great Little League field," says Beeson, "but the property line runs right down the middle of the field and the farmers were anxious to plant corn there again the following spring. They used the field only one more time during the winter to get footage of the field covered with snow."

The bluegrass has been turned under, the lights have been removed, and the farmers of Dyersville must watch the movie to see their short-lived baseball field. No doubt they'll be telling the story about night baseball in the middle of their corn fields for years to come.



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# Bermudagrass Solutions Transition Zone Fields

By Dave Minner



Typical low-budget practice field in the transition zone where spring and fall seedings of cool-season grasses have failed.

**T**rying to grow cool-season grasses in transitional climates with limited resources can frustrate managers of football and soccer fields. Usually the only time available to repair thin or damaged fields is from mid-May to mid-August, when these grasses are most difficult to reestablish.

If you have found yourself in this seemingly impossible situation, then you may want to consider bermudagrass as a means of establishing at least a reasonable stand of grass by the beginning of each football season. The goal for safe, low-maintenance fields is complete vegetative cover, not necessarily a beautiful, uniformly green appearance. We need to realize that when an athlete contacts the ground, color is of little importance.

Bermudagrass is a warm-season grass that can be successfully established or renovated during the summer, when fields are seldom in use. Fields that have heavy traffic in spring and fall rarely have enough time for reestablishment by seeding with cool-season grasses. Late spring and sum-

mer seeding of cool season turf is almost never successful here in Missouri.

On the other hand, late May through mid-summer is the best time to successfully establish or renovate bermudagrass. This fast-growing, fast-spreading grass has aggressive, creeping rhizomes. Its stolons can spread as much as three feet during the summer to cover worn areas. The result is a tough, wiry surface which results in good traction.

Bermudagrass is an excellent choice for practice football fields that receive most of their use early in the season (August through September) while it is still growing. Even when dormant, bermudagrass has good traction and cushion, so long as the dormant mat of vegetation is not entirely worn away.

If late season appearance is important, or the field is used to the point where the mat becomes damaged, bermudagrass can be overseeded with cool-season grasses. You may also try mixing it with perennial ryegrass to improve the success of late spring and summer seedings for repair of

cool-season athletic fields. This will usually ensure green cover and improved field performance during the early part of the fall playing season. It is especially popular where good turf cover during the playing season takes precedence over a uniform green color throughout the growing season.

The problem with bermudagrass is that it has the potential for winter injury in some portions of the transition zone. In my opinion though, managers of low-budget fields with limited irrigation should be more concerned with the potential for summer recovery of bermudagrass, rather than its likelihood of winter kill during extreme years.

Bermudagrass may not be a practical solution in portions of the transition zone where winter kill occurs on a yearly basis. However, in other areas of the transition zone, it may persist for five or even ten years with no severe winter kill. Consult your state extension specialist and local golf course superintendent to see how it performs in your area.

Bermudagrass will turn brown and go dormant after the first frost, leaving the field with poor color and recovery potential during the last half of the fall season (October to November) and during the entire spring season (March to mid-May). During the fall and spring it will be completely brown, and easily distinguished from weeds and other cool season grasses that are present. Fields that are entirely bermudagrass will have a more uniform appearance.

Although bermudagrass will tolerate drier conditions and requires less irrigation compared to cool-season grasses, it still requires some irrigation or timely rains during establishment and when recovery of worn areas is necessary.

There is no substitution for adequate irrigation. It should be the top priority in upgrading athletic fields. An irrigation system must be able to evenly supply a minimum of 1/4 inch of water to each field every day if necessary. Bermudagrass should not be viewed as a substitution for irrigation, proper fertility, or a regular cultivation program.

Most improved varieties must be established vegetatively as sprig, plugs or sod.

# for Low-Budget

On low-budget playing fields, availability, cost and specialized planting equipment may be a deterrent to using vegetative-type bermudagrass. Recently, seeded types of bermuda have been established to offer an easy, effective means of reestablishing worn-out areas during the summer, when field activities are minimal.

Midiron is one improved vegetative-type of bermudagrass. This hybrid, selected from Kansas State University, has a good winter hardiness and medium leaf texture. It also has slow recovery from traffic injury.

Tifway and Tifway II have a dark green color. Tifway II is a radiation-induced mutant of Tifway. Compared to Tifway, Tifway II makes a denser, more weed-free turf, is more frost tolerant, has earlier spring green-up, and has better quality turf.

Vamont is another improved vegetative-type bermudagrass. Released by Virginia Polytechnic Institute, it is used primarily in the eastern portion of the transition zone. Vamont is an aggressive spreader that is not as coarse as common bermudagrass, but its winter hardiness is inferior.

There are several less-improved vegetative-type bermudagrasses. Oftentimes, sod producers may offer local selections of bermudagrass that are not certified. Even though they are not, they may be well adapted to survive in the localized areas from which they developed. In Missouri, Westwood and Springfield are two local selections that have performed well.

Westwood was selected from Westwood Country Club in St. Louis, MO. It is very aggressive and has good winter hardiness, coarse texture, and excellent summer recovery from spring and fall sports. It is the most popular bermudagrass used on athletic fields in Missouri.

U-3 is an earlier release by the USGA Green Section and the USDA. Extensively used in the '50s and '60s, it has proven susceptible to winter injury and spring dead spot.

Tufcote, released by the University of Maryland in 1962, is another less-improved vegetative-type bermudagrass. It has rapid spread and moderate wear resistance, but has received only moderate use.

Seeded bermudagrasses are possible



Broadcasting sprigs by hand for spot renovation.

alternatives to vegetative types. Common bermudagrass, sometimes referred to as Arizona common, will establish a complete turf cover during the summer. Since the seed is usually grown in Arizona, Oklahoma and Georgia, common's winter hardiness is questionable. It is most susceptible to winter kill during the first season of growth. Common may persist for several years if it survives the first year. It is highly variable in performance and usually coarse-textured.

Guymon is a joint release from the Oklahoma AES and the USDA. It has a medium-to-coarse leaf texture and is believed to have good winter hardiness. It should not be mowed lower than a 3/4-inch height. At this time, Guymon is the only seed type that has improved winter tolerance, compared to other seeded common types.

NuMex Sahara was released by the New Mexico AES in 1987. Its adaptability for transition zone athletic fields has not been thoroughly evaluated. It is believed to have slightly better winter tolerance than Guymon, and better turf quality and density than either Guymon or common.

Bermudagrass should be seeded between early May and mid-July. August seeding or sprigging is not recommended, because there is not sufficient time for proper establishment before cold weather or sports. Seeding before May will result in heavy competition from spring weeds. Bermudagrass will not germinate or grow until soil temperatures have adequately warmed. Always use hulled seed for better germination and faster establishment.

To provide a faster cover with bermudagrass, some sports turf managers overseed newly sprigged or plugged improved types of bermudagrass with common seeded bermuda. In the northern portion of the transition zone, common bermudagrass will likely die out during the winter, but improved types will fill in during the following summer. Use one to two pounds of hulled bermudagrass seed per 1,000 square feet.

Vegetative bermudagrasses can be planted as plugs, sprigs or sod. Sod can be cut and laid from late March through July.

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## Bermudagrass Solutions

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However, do not install dormant sod on fields used during the spring. Bermudagrass areas beyond the end zone can serve as a nursery for annual reestablishment of worn areas, thus eliminating the need to purchase vegetative bermudagrass

during the early spring so that broadleaf herbicides will not interfere with summer establishment of bermudagrass.

The surface must be regraded if necessary, immediately after spring athletic games are over. Irrigate in late April and early May to germinate as much crabgrass as possible.

Where no desirable grasses exist, kill all

clippings can be removed, begin mowing at a height of 0.75 to two inches. MSMA and DSMA applications should be made according to their label recommendations to control crabgrass that competes with the establishing stand of bermudagrass.

One of the reasons bermudagrass has been recommended is its ability to maintain active growth and recovery during typically dry summers in Missouri. However, establishment will be greatly enhanced if some irrigation can be provided. Sprigs should not be installed unless they can be kept moist for at least the first three to six weeks after planting. Seeded bermudagrass will not germinate and establish unless rainfall or irrigation keep the top inch of soil moist for a minimum of two to four weeks.

Ideally, temporary or permanent irrigation should be available to supply water daily for the first month after planting, and at least twice a week thereafter. During the first three weeks, water shallowly and frequently to keep only the area of actively growing roots moist. As plants begin to tiller and produce deeper roots, irrigation should be applied to a deeper depth with less frequency.

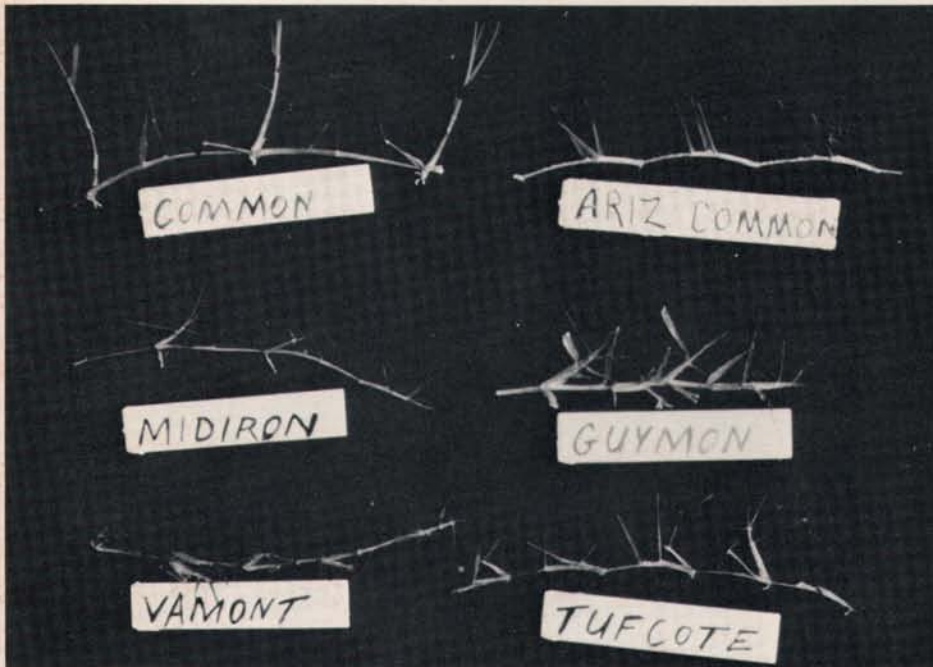
Established bermudagrass will usually survive even the driest summers in Missouri. However, if bermudagrass has been severely worn and is expected to rejuvenate from rhizomes and spread into bare areas, it will require weekly water from either rain or irrigation.

When bermuda is seeded, sprigged or plugged there will be exposed soil areas during the summer that will rapidly fill with weeds such as crabgrass, nutsedge, spurge and knotweed. No pre-emergent herbicides should be used in the spring and summer on weakened bermudagrass, or when attempting to establish new bermuda in the summer.

Annual grass weeds and nutsedge can be controlled with post-emergence applications of MSMA or DSMA. Repeat applications seven to 14 days apart may be necessary for adequate control. Delay application of MSMA or DSMA until turfgrass rooting has occurred and spreading stolons are visible. Try to time your MSMA application after three to four mowings, when warm-season grasses will be actively growing and crabgrass will begin to dominate the turfgrass canopy.

Common bermudagrass on weak fields can be overseeded with perennial ryegrass on a yearly basis, just to provide a cover of grass during the first portion of the fall playing season. A broadcast seeding of perennial ryegrass in late August or early September (seven to ten pounds per 1,000 square feet), without mechanical incorporation of the seed, will provide improved appearance while bermudagrass is dormant in late fall and early spring.

*Editor's Note: Dr. David Minner is assistant professor of horticulture at the university of Missouri, Columbia.*



Bermudagrass varieties show differences in texture and density.

each year.

Plugs are usually one to two inches in diameter, with one to two inches of soil attached. They should be fitted tightly into prepared holes, and stamped firmly into place. Plugs are generally placed six to 12 inches apart. Closer spacing may be used to hasten cover of the turf area.

Sprigs are pieces of torn turf, usually containing a stolon with roots and as many as four nodes. They can be planted by broadcasting them over loose soil, followed by a light discing to partially cover them with soil. A portion of each sprig should remain exposed after planting. Mechanical spriggers are also available. In either case, the sprig should promote roots and creeping stems from the nodes.

Sprigs can be purchased by the bushel. Plant eight to ten bushels per 1,000 square feet. Sod can also be purchased and processed into sprigs. One square yard of sod will make approximately one bushel of sprigs. Areas that are sprigged can also be overseeded with a 1/2 pound of bermudagrass seed and four pounds of perennial ryegrass per 1,000 square feet to provide a quicker and denser cover by mid-August.

There are several steps to renovating with bermudagrass. Fields must first be prepared. Broadleaf weeds, particularly knotweed and speedwell, must be controlled

vegetation with glyphosate, and seed or sprig in seven to 14 days. If desirable grasses exist, kill newly emerged crabgrass with MSMA or DSMA and seed or sprig 14 days after application.

Killing the first flush of crabgrass before seeding or sprigging bermudagrass will reduce crabgrass competition, and its need for control during the remainder of the year. Bermudagrass will establish much better if it has less weed competition, and if applications of post-emergence herbicide are held to a minimum.

When seeding, loosen hard soils and prepare a seed bed by intensively coring, spiking or slicing. After seeding, lightly rake or drag the surface to ensure good seed-to-soil contact. If a drill or slit seeder is used, make at least two passes in opposite directions using a quarter of the total amount of seed. The remainder of the seed should be broadcast to provide faster and more uniform coverage.

Add lime, if needed, and fertilizer. Apply one pound of nitrogen, phosphorus and potassium per 1,000 square feet per month during the first three months of establishment. Make the lime and first fertilizer application immediately before preparing the seed bed to improve incorporation into the soil.

Water frequently to encourage germination and rapid turf coverage. As soon as



## GCSAA OFFICERS APPROVE PLANS FOR NEW HEADQUARTERS

While Curtis Strange, Tom Kite and Mark McCumber were fighting for the lead of the U.S. Open at Oak Hill Country Club in Rochester, NY, the officers of the Golf Course Superintendents Association of America (GCSAA) were meeting nearby reviewing plans for a new \$4 million association headquarters building. Their approval of the plans sent a message to the golf world that GCSAA intends to stay in Lawrence, KS, and that it is bracing for continued growth in membership and services in the coming decade.

The new four-story, 35,000 square foot building will nearly triple the space available for GCSAA's 42-member staff and allow room for projected growth. It will also contain a 70-seat classroom and meeting facility.

"GCSAA's growth has mirrored that of the rest of the golf industry," stated association president Dennis Lyon during the announcement. The association's membership has nearly doubled to 8,600 since the association moved to Lawrence in 1974. A second wing was added to the existing headquarters three years ago. "This new building will allow us to keep meeting the needs of our growing membership and the golf community at large," Lyon added.

Construction is set to begin early next year with completion in the spring of 1991. The new headquarters will be one mile west of the current facility, located on the grounds of Alvamar Golf & Country Club. Despite the relocation, the headquarters will still overlook an Alvamar course. Robert Billings, owner of Alvamar, is building another 18-hole course adjacent to the site. Architect Ken Kavanaugh designed the championship layout which is also scheduled for completion in mid-1991.

## PALMER DESIGNS LOUISVILLE CHAMPIONSHIP COURSE

NTS, Kentucky's largest real estate developer, has teamed up with Arnold Palmer to design and build an 18-hole championship golf course in Louisville, KY. The 7,000-yard course will be the center of attention for NTS's newly-planned Lake Forest club community.

"We're excited about bringing to Louisville and Jefferson County the kind of club community found only in the resorts of Florida and Hawaii," said Dick Johnson, senior vice president of NTS. Lake Forest will be a single-family, planned residential community consisting of 670 homesites.

Ed Seay, vice president of Palmer Course Design Company; Erik Larsen, the company's senior architect; and Palmer cooperated on the design of the project. Seay has



participated in the design and construction of more than 75 golf courses.

Construction of the course will begin this fall. Each hole will offer five different tee locations to match the skills of all golfers. Five lakes and numerous sand traps will be strategically placed in the rolling, wooded area to challenge golfers. The course is scheduled to open in the fall of 1991.

Lake Forest's new Palmer course will be adjacent to Valhalla Golf Club, a three-year-old, private championship golf course designed by golfer Jack Nicklaus.

L to R: Erik Larsen, NTS Vice President Hal Heiner, Arnold Palmer, and Ed Seay.

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## THE BEAM CLAY® BASEBALL DIAMOND OF THE YEAR AWARDS

The judges for the 1989-1990 Beam Clay® Baseball Diamond of the Year Awards will be four head groundskeepers representing each of the major league divisions:

<b>AL-East</b> Harry Gill, Milwaukee Brewers	<b>NL-East</b> Pete Flynn, N.Y. Mets
<b>AL-West</b> Jim Anglea, Texas Rangers	<b>NL-West</b> Steve Wightman, San Diego Padres

Winners will be honored at the annual Sports Turf Manager's Association Awards Banquet and be featured in sportsTURF Magazine. No entry fee is required. So, if you're proud of your baseball facility, why not enter your baseball field in the Beam Clay® Baseball Diamond of the Year Awards contest?

The Awards are sponsored by Beam Clay®, The Sports Turf Managers Association, and sportsTURF magazine in recognition of excellence and professionalism in maintaining outstanding, safe, professional quality baseball diamonds. Entries will be judged in three categories: professional diamonds, college diamonds; and school, municipal or park diamonds.

Send the information below to enter:

1. Age of baseball diamond (year of installation).
2. Geographic location (city and state).
3. Description of maintenance program for turf and skinned areas.
4. Operating budget for baseball diamond.
5. Irrigation: None \_\_\_\_\_ Manual \_\_\_\_\_ Automatic \_\_\_\_\_
6. Total number of maintenance staff for field.
7. Does baseball field have lighting for night games?
8. Number of events on baseball diamond per year.
9. Types and number of events on diamond other than baseball?
10. How many months during the year is the field used?
11. Why you think this field is one of the best?
12. Send two sets of color slides or prints.

**Deadline for entries:** Entries must be postmarked no later than October 31, 1989.

Mail entries to:  
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## OHIO STATE PLANS GRASS FOR FALL OF '90

When John Cooper left Arizona State University to become head coach at Ohio State University, he started to miss the natural turf at Sun Devil Stadium in Tempe. The eight-year-old artificial surface at Ohio Stadium in Columbus was aging. Cooper immediately began to lobby athletic director Jim Jones to convert the stadium back to grass.

The odds were against him because the stadium is used almost constantly throughout the year for intramurals, soccer, softball and other sports in addition to football games and practices. He knew that natural turf could not withstand that kind of abuse.

But he persisted, and last month the school announced it will become the third Big Ten Conference team to convert to grass after the end of this year's football season. For most of this decade Indiana's Purdue has been the only conference school to have natural turf, the original P.A.T. field at Ross-Ade Stadium. The University of Iowa just converted Kinnick Stadium to P.A.T. this spring.

"Given my choice," states Cooper, "I'd prefer grass. I think you're better off playing football on grass." It appears that his choice has been approved, not just for the stadium, but for a new grass practice field on campus as well. The new, lighted practice

field is designed to take some of the load off Ohio Stadium.

The university has enlisted the support and advice of Dr. John Street and Dr. Karl Danneberger in its agronomy department as well as O.M. Scotts' agronomist Eugene Mayer for the project. Mike McBride, superintendent of Muirfield Village Golf Club in Dublin, OH, was a major proponent of the conversion to grass.

"The plan is either to seed or sod the field next spring with a mixture of Kentucky bluegrasses," says Danneberger. "The type of construction should be decided within the next two months. We think that Michigan (University of) will also make the switch in the next few years."

## HORSES AT SANTA ANITA WILL RUN ON TURF FIT FOR GOLFERS

Santa Anita Park in Arcadia, CA, recently borrowed the specifications for building a green from the United States Golf Association in reconstructing its turf track. The only difference between the USGA greens specs and the 9/10-mile-long track is the incorporation of interlocking geotextile grids into the top six inches of rootzone.

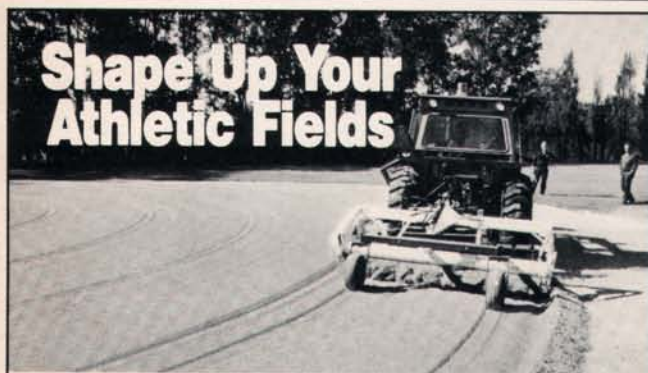
"The new track is the culmination of months of research and millions of dollars

in renovation," states Clint Granath, director of facility management for the famous race track. "The old turf course was totally excavated and widened to 80 feet from 65 feet. This required a whole series of associated changes, including increasing the size of the tunnels leading to the track. Altogether, more than \$3.2 million was spent on the project."

Santa Anita is the first track in the U.S. to incorporate the mesh elements (Netlon) made in England and to follow USGA specifications so closely. Dr. James Beard, professor of agronomy at Texas A&M University in College Station, recommended the combination based upon his involvement with a similar track surface at the Royal Hong Kong Jockey Club.

"The only major difference between the way we'll maintain our track and a golf green, is the cutting height will be higher," Granath explained. "It's really a ten-acre, curved golf green with grids mixed into the topmix."

In May, the course was excavated to a depth of 20 inches with the subgrade sloping toward the infield. Six-inch perforated drain pipe were installed along the inside curve and connected to catch basins every 100 feet. The drain pipe are covered with four inches of pea gravel, followed by a two-inch choker layer of coarse sand. "The choker layer prevents the finer sand above



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