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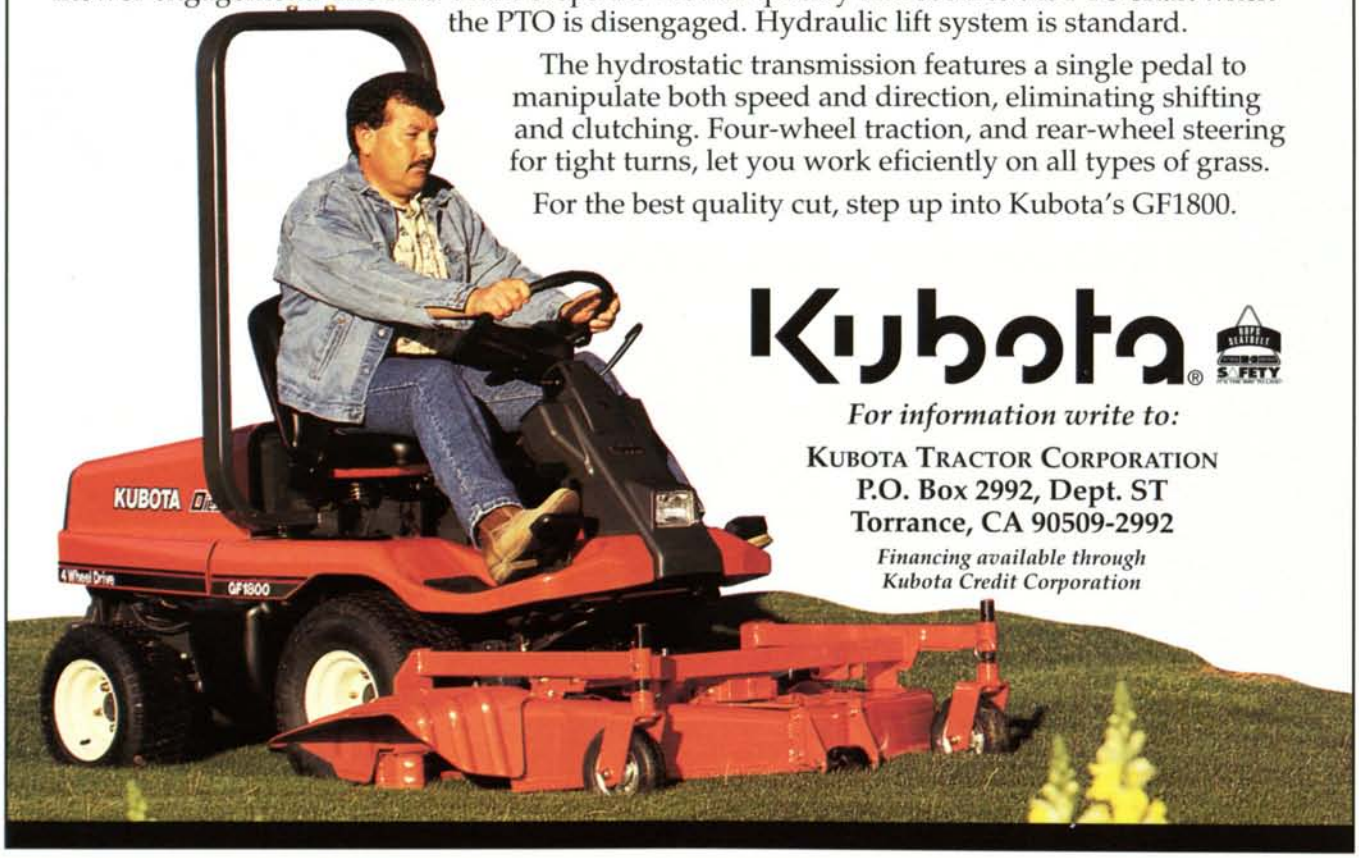

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VOLUME ELEVEN, NUMBER TWO FEBRUARY 1995

MAIN EVENTS

LINE-UP

On The Cover:

Getting your infield ready for the spotlight is both challenging and rewarding.

STMA Message

By Bret Kelsey – executive director of STMA.

Sports Turf Managers Association

Volunteers Are the Difference

It's hard to believe, but the calendar on the wall tells me that another year has zipped by. It seems like only yesterday that we were putting plans for 1994 together and now that year is history. It was a productive year for the STMA, but I'll let you be the judge of that.

One of the STMA's primary goals is to promote information sharing — among our members as a body, then among members, the industry and allied organizations. This sharing of information takes many forms: our annual conference and exhibition, regional sports turf institutes, affiliated regional chapters, *SportsTURF* magazine, bimonthly newsletters, sports turf topics, reference manuals and our membership directory. Each of these information-sharing forums provides the opportunity to network with others who are, have been or plan to take on the challenges you face every day in your facility.

In 1994, the STMA maintained its emphasis on education and representation of its members' interests in significant programs. The technical/standards committee is monitoring the ongoing development of standards for the construction of sports fields. An ad hoc committee was established to work toward the development of a certification program for sports turf managers. With the continued emphasis on safe playing-field conditions, STMA is positioning itself as the natural education provider.

There is no doubt that 1995 will be another challenging and exciting year. Volunteers are currently working on STMA issues such as membership service, chapter relations, education, the annual conference, awards/scholarship, communications and more. The volunteers on these committees are working to make the jobs of *every* sports turf professional better. We look forward to the challenge, and want to hear from you — members and nonmembers. The Marines aren't the only ones looking for a few good men and women. I encourage you to volunteer in the STMA and realize the many professional and personal benefits you can receive. See you in 1995!

STMA Chapter News

The Midwest Chapter STMA will hold its Fifth Annual Meeting and Luncheon March 2 at the Schaumburg Golf Club, Schaumburg, IL, from 9:30 a.m. to 2:15 p.m. The educational program will include "Limiting Liability Through Risk Management," "Base Safety Standards," by Lou Hernandez, sales manager for AFP Softouch; and "Sports Field Facilities: Improving General Safety." Following the luncheon, the awards program and a chapter membership update will be presented.

Midwest Chapter board meetings are held on the second Wednesday of every month. Chapter members are invited to attend. For information on the annual meeting, the chapter, board meetings or other upcoming activities, call The Chapter Hotline, (708) 439-4727.

The New England Chapter STMA urges members to attend the Massachusetts Turf Conference March 6-8 in Springfield. Highlights include presentations by STMA President Greg Petry, Dr. Norm Hummel of Cornell University, Dr. Eric Nelson of Medalist America and Pierre Landry of the New England Patriots. For more information on the conference, contact the Massachusetts Turf and Lawngrass Association at (413) 549-5295.

The annual NESTMA Breakfast is scheduled for March 8 and is open to all NESTMA members.

For information on the breakfast, the chapter or other upcoming events, contact Mary Owen at the University of Massachusetts Cooperative Extension System at (508) 892-0382.

The Minnesota STMA's next meeting is scheduled for March 14. The site, time and other meeting details will be announced. For information on the Minnesota Chapter or future chapter activities, contact Mike McDonald, Bierman Athletic Complex, University of Minnesota, Minneapolis, (612) 625-6097; or Brian Deyak, St. Cloud Sports Center, (612) 255-7223.

The Southern California Chapter STMA has scheduled a Landscape and Lawn Seminar for April 27 at Sea World in San Diego. Multiple demonstrations are planned for the morning sessions covering topics such as big-roll sod, pruning, bedding plants, aeration and mowing comparisons. For information on the seminar, the Southern California Chapter and other upcoming activities, contact Chris Bunnell at (619) 432-2421.

Chesapeake Chapter STMA has several events in the planning stages for 1995, including a Spring Irrigation Seminar; a Fall Football Seminar; and short, informal bimonthly "tour and how-we-do-what-we-do" meetings at various sites throughout Maryland, Virginia and Pennsylvania.

Chapter board meetings are held the first Tuesday of each month from 4-6 p.m. Members are invited to attend. For information on the chapter or upcoming activities, call the Chapter Hotline, (410) 290-5652.

The Heartland Chapter STMA is planning a February meeting. For details about the meeting, or the chapter, contact Matt Hoops at (816) 436-2200.

Iowa Chapter STMA — For information on the Iowa Chapter or chapter activities, contact Gary Peterson at (515) 791-0765.

Colorado Chapter STMA — At its Jan. 13 meeting, the Colorado Chapter STMA elected the following officers and board members for 1995: president, Ross Kurcab — Denver Broncos; vice president, David Rulli — Jefsco Schools; commercial officer, Larry Perotti — Sharp Brothers Seed; and past president, Joe Adams — city of Greeley. Board of directors elected are: Armen Suny, golf course and sports turf consultant; Bill Goble, Colorado State University (Hughs Stadium); Ken Norkowsky, city of Aurora; Ron Williams, city of Greeley; and Bill Whirty, city of Fort Collins. Executive secretary is Troy Smith of the Denver Broncos.

For more information on the Colorado Chapter or future activities contact Kurcab at (303) 649-9000 or Mark Leasure, Colorado Springs Sky Sox, at (719) 597-1449.

STMA Florida Chapter #1 — For information about the South Florida Chapter or upcoming activities, contact John Mascaro at (305) 938-7477 or Tom Curran at (305) 786-4001.

THE FRONT OFFICE

OPINION PAGE

Wanted: Your Input

Enthusiasm. "Ya gotta have it." An enthusiastic attitude can get you through stressful times better than beer, brute force or bitching. It's all too easy to slide into the doldrums when the pressure starts mounting. By facing each day with enthusiasm, the crises can come and go and leave you still smiling.

Those of you who attended the STMA annual meeting know by now that Bruce Shank has left Adams Publishing to pursue other interests. We wish him well. But we're very fortunate in finding Mike Augsdorfer to take over the helm at *SportsTURF*. Mike has a great background for this job. He was formerly an editor at a regional golf publication and is a diehard fan of just about any sport that's played on a field.

Best of all, Mike has enthusiasm. He's truly excited about the opportunity to learn more about you and the work you do. You'll find him accessible, outgoing and willing to listen to all your suggestions, ideas and insights. Since *SportsTURF* will be one of Mike's primary jobs, he will have time to actively participate in the industry.

In my new position as editorial director at Adams Publishing, I'm also looking forward to working more closely with STMA. I've been in the horticultural field for about 10 years now, and I've had the chance to meet many of you at various green-industry events. I've always enjoyed the chance to network with sports turf managers, mainly because your enthusiasm about your work is contagious. It's a quality that sets you apart from most of the other green professions.

So please, write, call or fax us with your input (we'll also have an e-mail address up and running in the next few months). Our primary goal is to make the nuts and bolts of your job easier and more efficient. In addition, we want to address legislative, regulatory, safety and personnel issues. But in order to acheive these goals, we need to hear from you. Remember, you are the whole reason this magazine exists.

Helen M. Stone

EVENTS

CALENDAR

FEBRUARY

15-17 Athletic Field Construction and Maintenance, Cook College, Rutgers University. Contact: (908) 932-9271.

20-27 Golf Course Superintendents Association of America International Conference and Trade Show. Moscone Center, San Francisco, CA. Contact: GCSAA, (913) 841-2240.

22 PLCAA Winter Workshop. Detroit, MI. Contact: (800) 458-3466. Fax: (404) 578-6071.

23 PLCAA Winter Workshop. Detroit, MI. Contact: (800) 458-3466. Fax: (404) 578-6071.

25-28 Restoration '95 — "Affordable Preservation: Practical Strategies for the '90s." Hynes Convention Center, Boston, MA. Contact: Steve Schuyler, (617) 933-9055. Fax: (617) 933-8744.

27-28 Legislative Day on the Hill, Washington, D.C. Hosted by PLCAA. Contact: (800) 458-3466.

MARCH

28-3 International Erosion Control Association Show. Atlanta, GA. Contact: (303) 879-3010.

5-8 Massachusetts Turfgrass and Industrial Show. Springfield, MA. Contact: (413) 549-5295.

7-9 Western Pennsylvania Turf Conference and Trade Show. Pittsburgh Expo Mart/Radisson Hotel, Monroeville, PA. Contact: Eric Oesterling, (610) 837-1402 or P.T.C., (814) 863-3475.

8 Professional Turf and Plant Conference. Huntington Town House, Huntington Station, NY. Contact: Maria Cinque, (516) 454-0900.

11-14 Forty-sixth Canadian Turfgrass Conference & Trade Show. (General Meeting, March 13). Ottawa Congress Centre, Ottawa, ON, Canada. Contact: (800) 387-1056.

EVENTS

CALENDAR

MARCH

14 Shigo on Trees, sponsored by the National Arbor Day Foundation. Atlanta, GA. Contact: (402) 474-5655.

14-15 Energy Show and Conference '95, sponsored by Southern California Edison. Long Beach Convention Center, Long Beach, CA. Contact: Carroll Whittet, (310) 491-2424.

14-19 Twenty-first Annual Water Quality Association Convention and Exhibition. Opryland Hotel & Convention Center, Nashville, TN. Contact: (708) 505-0160. Fax: (708) 505-9637.

15 Shigo on Trees, sponsored by the National Arbor Day Foundation. Orlando, FL. Contact: (402) 474-5655.

19-22 Golf Development Expo VII, The Wyndham Hotel and Palm Springs Convention Center, Palm Springs, CA. Contact: (800) 208-6508.

28-30 "Practical Approaches for Effective Erosion and Sediment Control," "Bioengineering Techniques for Streambank and Lakeshore Erosion Control," and "Design Methods for Channel Protection and Streambank Stabilization," sponsored by the International Erosion Control Association. Portland, OR. Contact: IECA, (800) 455-4322 or (303) 879-3010.

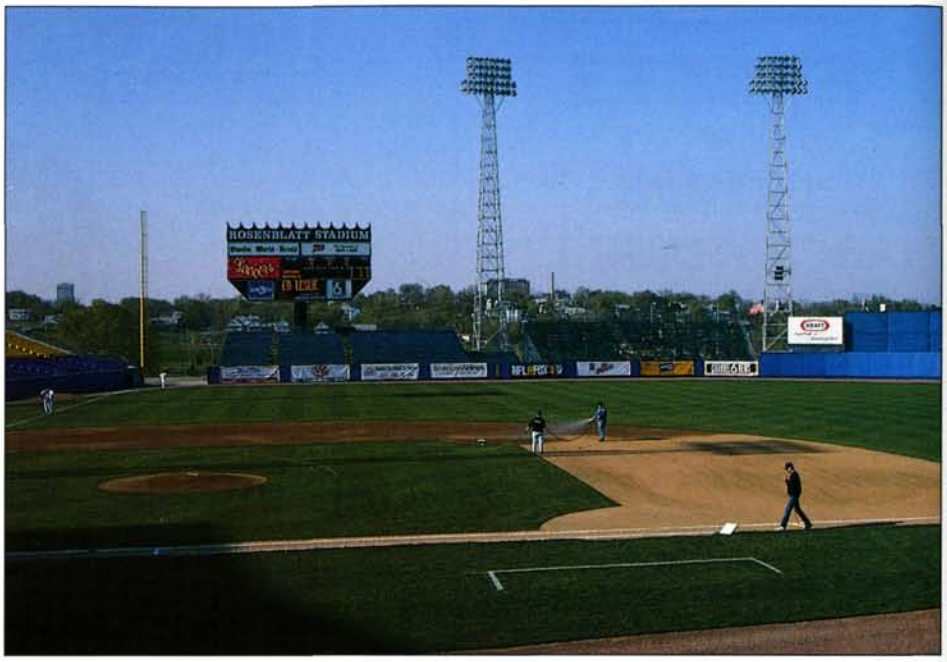
APRIL

2-5 Computer Conference, sponsored by American Water Works Association. Norfolk, VA. Contact: (303) 794-7711.

2-5 Fifth International Microirrigation Congress, sponsored by the ASAE in cooperation with The Irrigation Association and the Florida Irrigation Society. Hyatt Regency Orlando Hotel, Orlando, FL. Contact: Jon Hiler, ASAE, (616) 429-0300.

Send announcements of your events two months in advance to: Editor, **sportsTURF magazine,** 68-860 Perez Road, Suite J, Cathedral City, CA 92234. Fax (619) 770-8019.

You and your crews are the third team out there — and how you do your job dictates how the game is played.



Preparing Skinned Infields, Basepaths, Pitcher's Mounds and Batter's Boxes

By Jesse Cuevas

Infields are the cause of more groundskeepers' nightmares than any other aspect of baseball-field development and maintenance. Get two or three of us together and the topic is sure to be discussed.

With a full contingent of managers, coaches and players on each team, you're sure to be off the mark in the eyes of at least some of them. And there is no middle ground; you're either doing a terrific job or a lousy one. If a player or team has a great day, you're great, too. If a player has a bad day, and the team loses — well, it has to be your fault.

At Omaha's Johnny Rosenblatt Stadium — home of the AAA Royal's baseball team and host site of the NCAA College World Series — we've experimented with many different mixes for the infield and basepaths. We've settled on a base of native material, a light clay-loam, for 50 percent of the mix. After tackling this "discovery" process, I suggest the groundskeeper develop basic specifications first, then "shop" potential sources for a workable match. The low cost and ready availability of the material are well worth the extra effort involved.

The clay-loam base is augmented with 25-percent calcined clay and 25-percent sand. The sand is the same type and grade as the sand used in the root mix for the rest of the field, meeting the old USGA specifications for the sand used in greens construction. Since clay and fine sand are mixed to make bricks, and you sure don't want a brick infield, avoid sand that is too fine. We order premixed material for the rootzone of 85-percent sand and 15-percent Dakota Sedge Peat. The same source provides the straight sand at a cost just slightly above the price level of less compatible sand in the area.

We use the straight clay-loam for the pitcher's mound and batter's box. In rainy situations, we'll apply a bit of calcined clay when the surface is wet, then sweep it off with a broom when the area dries.

We work the mound and home plate after every use or tackle them first as game preparations begin for the next day. We work the soil, pack it down and apply a good soaking of water. The amount of water must be adjusted according to weather conditions. We'll water two or three more times before the game, so each application has to be judged according to current conditions, and what they probably will be later. If the day is cloudy and humid, less water is needed. If a hot, windy day makes it hard to keep the areas moist, we tarp them to retain an adequate moisture level. The mound and batter's box should be firm, with just a hint of moisture, at game time. The trick is to let them evaporate into the condition you want to develop the "right" degree of firmness.

We've installed numerous basepath "test plots" behind the stadium using various additives and different mix proportions to find out what works best for us under our conditions. Keys to success are the type of sand selected, the amount of sand used and how the mixing is handled.

We strive for a firm and slightly moist base with a spike-depth (approximately 1/4 inch) of loose, dry covering

These photos were taken after batting practice and show final pre-game infield preparation. Jesse Cuevas is wearing a jacket and hosing down the infield.

on top. To determine if we've met that goal, we check the base layer after the game. If the player's spikes have just entered the base surface and come out cleanly, we hit the mark. If there were only spike scratches on the base surface, it was too hard. If the spikes broke the base surface, but pulled out clumps or chunks of the mix, it was too wet.

We check the relative-humidity and dew-point readings several times during the day, anticipating that for day games those readings may drop, while for evening games they'll generally rise.

We split the game in half, shooting for ideal conditions for the first half of play. We'll have the opportunity to apply a light layer of calcined clay if the skinned surfaces are too wet going into the second half of play. If the surfaces are too hard, we can loosen them up a bit with the proper drag. The surface needs to remain smooth, not choppy. If conditions keep fluctuating, we're more inclined to lean a bit to the hard side, to at least give the players an honest bounce for each play.

We use a nail drag to turn the infield over each day. Basically, we'll tear up as much of the surface as we want, approximately a spike-depth. Select the type of drag and the amount of weight on it according to what you want to accomplish. For example, we have split 2-by-12 boards within a 2-by-4 frame with 60 D nails placed in three rows on each board. Another drag has a similar setup, but uses fewer nails and has a wider space between each nail. To turn over more material, use a drag with more nails. To tear up a deeper swath, use a heavier drag. We use a small pull-behind roller to firm the basepath if it's too loose.

After tearing up the basepath, we smooth it with a mat drag. Our arsenal here includes 2-by-12s, double-stacked like dominoes to eliminate clumps; a section of chain-link fence; a section of chain-link fence with nails; a cocoa mat with nails; and a smaller, finishing cocoa mat.

We mark the field before batting practice, since none of our crew members appreciate performing that task for a packed stadium of spectators. Following batting practice, we use a push broom to smooth over any lines and re-mark any damaged areas. We always re-mark the batter's box. Then we use a small cocoa-mat drag to finish the basepaths.

We turn over the entire skinned infield area with a tiller two or three times a year. The individual components of the infield mix tend to separate over time. During the tilling process, or when constructing a new field, we top-load the sand and soil amendments in the top 2 inches of the field. For example, if your infield mix depth is 6 inches when you're starting from scratch, retain one half of the soil amendment and sand for the top 2 inches of the field. This provides that extra edge of drainage that can pull you through two or three innings in a rain.

Mixing the various components is a seat-of-the-pants effort. Divide the soil amendments equally for each side of the infield. If you're adding two tons of material, packaged in 50-pound bags, lay 40 bags — spaced as evenly as possible — on one half of the field; the other 40 bags on the other. Space 20 bags along the line from second base to third base; 20 bags from third base to home. Space 20 bags along the line from first base to second base; 20 bags from first base to home. Open the bags in place and spread them evenly across the top of the skinned surface. Then work the material in thoroughly.

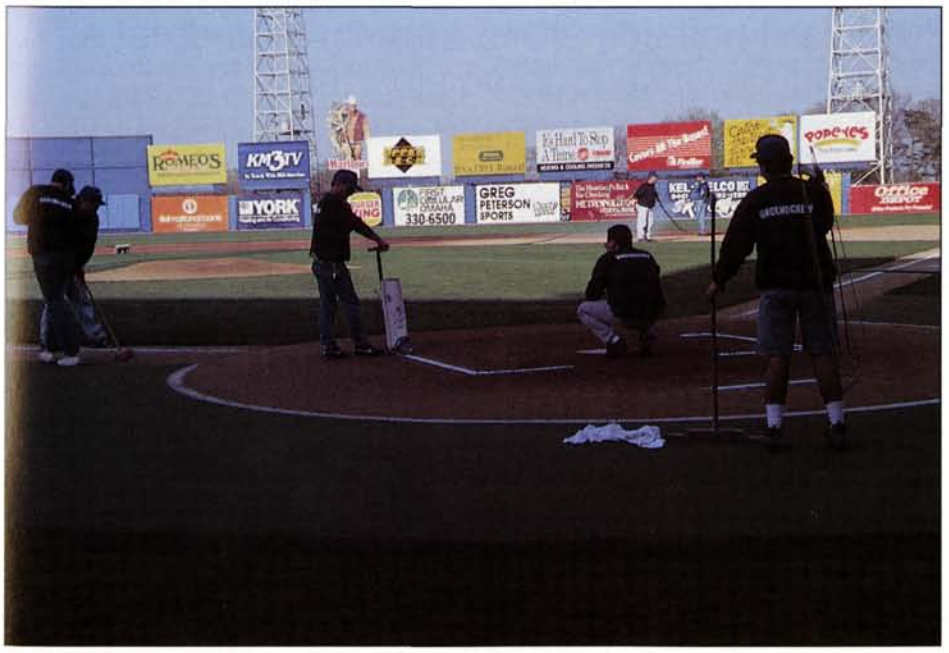
Adding the sand a little at a time, then mixing it in, is better than adding the sand all at once. It's easier to add a little more than it is to pull some back out. It could take two to three days to get the proportions you want.

Use a trailer you're comfortable with, or a topdresser at a low setting, to spread the sand. Use one load for each half of the field to balance the portions. Mix in the sand. Then follow up with your standard pre-game preparations. Check the results. Talk with the players and coaches. Add more sand, or adjust your finishing process, until you hit the consistency you want. Adding sand is like adding salt — do it "to taste." The sand is the final touch that brings the infield together.

Lip prevention is another aspect of skinned-area care. Use a push broom or stream of water from the hose to wash any stray infield material from the edge of the grass. Daily attention in this area will keep a clean division between the turfed and skinned areas and prevent "bad hops."

You'll spend lots of time on the infield, because the players do. It can be the most grueling part of your maintenance routine. You'll be out there when it's hot and humid, gathering your own layer of infield mix. And you'll be out there when it's cold and rainy, getting your feet wet and your hands icy.

But baseball is the only game of major sports where someone outside the game has a huge impact on the game. You and your crews are the third team out there — and how you do your job dictates how the game is played. ❑



Jesse Cuevas is the stadium superintendent of Johnny Rosenblatt Stadium, Omaha, NE, and a past board member of the national Sports Turf Managers Association.

The distinctive patterns developed by sports turf managers have become a "signature" of some fields.

Oriole Park at Camden Yards during the filming of Major League II.

Mowing Tips: Cutting Heights, Frequency and Patterns

By Steve and Suz Trusty

Mowing is a vital part of the turf growth-control program. Sports turf managers know that mowing decisions concerning cutting height, frequency and patterns impact far more than the aesthetic appeal of the field. They affect turf health, density, playability and grass-variety dominance.

The nature of grasses makes mowing an option in turf control. Growing points are located immediately above the nodes, in the leaf at the base of the sheaths and at the base of a blade. Grass vegetative growth consists mostly of leaves, with little elongation of stems. The stems and growing points (buds) are concentrated near ground level. Thus mowers can cut away the tips of the leaves without stopping their growth and hindering the formation of new leaves.

But mowing does alter natural conditions. The grass leaf area (the blade) is necessary for food production and other plant-life processes. As the mower cuts the grass blade, it inflicts a wound. The plant compensates for this loss by first channeling more food (carbohydrates) to leaf growth; then "feeding" the roots, rhizomes and stolons. Because the plant attempts to balance its aboveground growth with its belowground growth, root development may slow or stop until leaf growth is restored.

Various grasses have different tolerance to mowing. Creeping, stolon-producing grasses, such as Bermudagrass, tolerate close mowing. More upright grasses, such as bluegrass and ryegrass, need higher mowing levels to thrive. Also, fine-bladed grasses can be cut shorter than coarse-textured grasses.

Optimum height of the cut is determined by the natural growth pattern of the specific grass variety (physiological characteristics); the form and structure of the specific grass cultivar (morphological characteristics); the physical characteristics of the site; the vigor and density of the turf; and the environmental conditions — in conjunction with the role the grass has to play.

In southern regions, hybrid Bermudagrass may have a suggested height of cut ranging from 1/4 to 1 inch; common Bermudagrass, a range of 1/2 to 1.5 inches. In the northern transition zone, a Bermudagrass cutting height above 1/2 inch may produce a surface too loose and spongy for adequate footing.

The cool-season grasses — bluegrass, perennial ryegrass and turf-type tall fescue — have a suggested cutting range of 2 to 3 inches.

For cool-season grasses the ideal temperature range is 60 to 75 degrees Fahrenheit; for warm-season grasses, the range is 80 to 95 degrees. When temperatures at grass-growing points are above or below these ranges, growth slows or stops, putting the turf into a period of dormancy.

Grass blades provide the growth points with insulation against heat or cold. The leaf tissue also protects growth points from mechanical injury caused by traffic and wear. A cut too low stresses turf, making it susceptible to disease and insect invasion. Sports turf professionals have developed mowing strategies to fit their specific fields and conditions.

continued on page 14